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JOURNAL	REFERENCE AUTHORS	AUTHORS TITLE JOURNAL	REFERENCE	NID KEYWORDS SOURCE ORGANISM	RESULT 1 D88452 LOCUS DEFINITION ACCESSION
Direct Submission Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases. Hiroyuki Sekimoto, The Institute of Physical and Chemical Research, Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,	9/326103 2 (bases 1 to 4333) Sekimoto,H.	Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997)	Eukaryotae; Viridiplantae; Charophyta/Embryophyta group; Embryophyta; vascular plants; seed plants; Magnoliophyta; Liliopsida; Poales; Poaceae; Zea. 1 (sites)	g2589163 aldehyde oxidase-2; zmAO-2. Zea mays coleoptile cDNA to mRNA. Zea mays	D88452 4333 bp mRNA pLN 10-NOV-1997 Zea mays mRNA for aldehyde oxidase-2, complete cds. D88452

Result Query
No. Score Match Length DB ID

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description

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FEATURES
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Fax:+81-48-462-4691)
                                                 Sekimoto,H., Seo,M., Dohmae,N., Takio,K., Kamiya,Y. and Koshiba,T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103
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aldehyde oxidase-2; zmAO-2.
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Zea mays mRNA for aldehyde oxidase-2, complete cds.
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                           (bases 1 to 4333)
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GVVKDQDLYDKYLDIKGIPELSVINRNDKGIELGSVVSISKALEVLSDGNLVFRKIAG
HLNKVASPFVRNTATIGGNIVMAQRLPFASDIATILLAAGSTVTIQVASKRLCFTLEE
FLQQPPCDSRTLLSIFIPEWGSNDVTFETFRAAPRPLGNAVSYVNSAFLARTSLDAA
SKDHLIEDICLAFGAYGADHAIRARKVEDYLKGKTVSSSVLLEAVRLLKGSIKPSEGS
THPEYRISLAVSFLFTFLSSLANSLNESAKVSGTNEHSPEKQLKLDINDLPIRSRQEI
FTDAYKSVGKAIKKAGVEIQASGEAVVVDDLPAPKDCLYGAFIYSTHPHAHVKSINF
KPSLASQKIITVITAKDIPSGGQNVGYSFPMIGEEALFADPVAEFAGQNIGVVIAQTQ
KYAXMAAKQAIIEYSTENLQPPILTIEDAIERSFFOTLPFSTQLPESTONVVAKCVGIIFFH
NVRVITRRVGGGFGKALKSMHVACACAVAALKLQRPVRMYLDRKTDMIMAGGRHPMK
VKYSVGFKSNGKITALHLDLGINGGISPDMSPMLAPVIGSLKKYNNGNLAFDTKVCK
VKYSVGFKSNGKITALHLDLGINGGISPDMSPMLAPVIGSLKKYNNGNLAFDTKVCK
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/db_xxef-"plD:g2589164"
/tanslation-"mengKAAAVVLAVNGKRYEAAGVDPSTTLLEFLRTHTPVRGPKL
GCGEGGGGACVVLVSKYDPATDEVTEFSASSCLTLLHSVDRCSVTTSEGIGNTKDGYH
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GEASTYSLYTMFDKLASSPEYQHRAEMVEQFNRSNKWKKRGISCVPVTYEVQLRPTPG
KVSIMNDGSIAVEVGGVELGQGLWTKVKQMTAFGLGQLCPGGGESLLDKVRVIQADTL
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91. .4140
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91. .4140
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SVNLSAHAYWTPDPTFTSYLNYGAGTSEVEIDVLTGATTILRSDLVYDCGQSLNPAVD
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GNLCRCTGYRPIVDACKSFAADVDLEDLGLNCFWKKGDEPADVSKLPGYNSGDVCTFP
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/db_xref="taxon:4577"
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Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.
Hiroyuki Sekimoto, The Institute of Physical and Chemical Research, Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01, Japan (E-mail:sekimoto@postman.riken.go.jp, Tel:+81-48-462-1111,
Eukaryotae; mitochondrial eukaryotes; Alveolata; Ciliophora; hypotrichs; Stichotrichida; Oxytricha.

1 (bases 1 to 7049)
Mansour, S. J., Hoffman, D.C. and Prescott, D.M.
A gene-sized DNA molecule encoding the catalytic subunit of DNA
                                                                                                                                                                                                                                                                Oxytricha nova micronuclear DNA polymerase alpha partial cds.
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HLNKVASPFVRNTATIGGNIVMAQRLPFASDIATILLAGSTVTIQVASKRLCFTLEE
FLQQPPCDSRTLLLSIFIPEWGSNDVTETETFRAAPRPLGNAVSYVNSAFLARTSLDAA
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LGQVEGAFVQGVGFFTNEEYATNSDGLVIHDGTWTYKIPTVDTIPKQFNVELINSARD
QKRVLSSKASGEPPLLLASSVHCAMREAIRAARKEFSVCTGPANSAITFQMDVPATMP
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PVQQRLSGFHASQCGFCTPGMCMSIFSALVKADKAANRPAPPAGFSKLTSSEAEKAVS
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/db_xref="PID:g2589164"
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/db_xref="taxon:4577"
/tissue_type="coleoptile"
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100.0%; Pred. No. 0.002;
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                                                Sekimoto,H., Seo,M., Dohmae,N., Takio,K., Kamiya,Y. and Koshiba,T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
Sekimoto, H.
                                                                                                                                                                                                                                                      aldehyde oxidase-2; zmAO-2.
Zea mays coleoptile cDNA to mRNA.
Zea mays
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Embryophyta; vascular plants; seed plants; Magnoliophyta;
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                          (bases 1 to 4333)
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KYAYMAKQAIIEYSTENLOPPILTIEDAIERSSFGTLPFVAPKPVGDYDKGMSEAD
HKILSAEVKIESGYFFYKBPQVALAIFDEDNCTITYFSTGLPEPSTQNIVVAKCVGIPFH
NVRVITRRVGGGEGGKALKSMHVACACAVAALKLORPVRMYLDRKTDMIMAGGRHPMK
VKYSVGFKSNGKITALHLDLGINGGISPDMSPMIAAPVIGSLKKYNWGNLAPDTKVCK
TNVSSKSSMRAPGDAGGSFIABAIIEHVASALSADTNTIRKNLHDFESLAVFFGDSA
GEASTYSLVTMFDKLASSPEYQHRAEMVGFNESNKWKKRKGISVPVTYEVQLRPTPG
KVSIMNDGSIAVEVGGYELGGGLWTKVKQMTAFGLGCLCPGGGESLLDKYRVIQADTL
SMIQGGVTGGSTTSETSCEAVRKSCVALVESLKPIKENLEAKTGTVENSALIAQASMA
SVNLSAHAYWTPDPTFTSYLNYGAGTSEVEIDYLTGATTILBSDLVYDCGGSLNPAVD
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QKRVLSSKASGEPPLLLASSVHCAMREAIRAARKEFSVCTGPANSAITFQMDVPATMP
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GVYKDQDLYDKYIDIKGIPELSVINRNUGHERIAG
HLNKVASPFVRWTATIGGNIVMAQHLPFASDIATILLAGSTVTIQVASKRLGETLER
HLNKVASPFVRWTATIGGNIVMAQHLPFASDIATILLAGSTVTIQVASKRLGETLER
FLQQPPCDSRTILLSIFIPEWGSNDVTFETFRAAPRPLGNAVSYVNSAPLARTSLDAA
SKDHLIEDICLAFAYGADHAIRARKVEDYLKGKTVSSYVILEALKGSIKPSEGS
THPEYRTSLAWSFLFFFLSSLANSLNESAKVSCYNEHSPEKQLKLDINDLPIRRAGET
THPEYRTSLAWSFLFFFLSSLANSLNESAKVSCYNEHSPEKQLKLDINDLPIRRAGET
FFTDAKKPVGKAIKKAGYEIQASGEAVYVDDIPAPKDCLYGAFIYSTHPHAHVKSINF
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GNLCRCTGYRPIVDACKSFAADVDLEDLGLNCFWKKGDEPADVSKLPGYNSGDVCTFP
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1056 c 1138 g 1019
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/db_xref="PID:g2589164"
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/tissue_type="coleoptile"
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A for aldehyde oxidase-2, complete cds.
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Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase
                                                                                                      Eukaryotae; Viridiplantae; Charophyta/Embryophyta group; Embryophyta; vascular plants; seed plants; Magnoliophyta;
                                                                                                                                                                                                                            g2589161
aldehyde oxidase; zmAO-1.
                                                                                                                                                                        Zea mays coleoptile cDNA to mRNA.
Zea mays
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Direct Submission

DBJ/EMBL/GenBank databases.

Biroyuki Sekimoto, The Institute of Physical and Chemical Research,

Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
                                                                                     Liliopsida; Poales; Poaceae; Zea
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GNLCRCTGYRPIVDACKSFAADVDLEDLGLUCFWKKCDEPADVSKLPGYNSGDVCTFP
DFLKSEMKSSIQQANSAPVPVSDDGWYRPRSIDELHRLFGASSSFDENSYKIVASSHTGS
GVKNDDLYDXXIDIKGIPELSVINRNDKGIELGSVVSISKAIEVLSDOKLVFRIAG
HLNKVASSFVRNTATIGGNIYMAQRLPFASDLATILLAGSTYTIQVASKRLCFTLEE
FLQQPPCDSRTLLLSIFIPEWGSNDVTFETFRAAPRPLGNAVSYVNSAFLARTSLDAA
SKDHLIEDICLAFGAVGADHAIRARKVEDYLKGKTVSSSVILEAVRLLKGSIKSEDAA
SKDHLIEDICLAFGAVGADHAIRARKVEDYLKGKTVSSSVILEAVRLLKGSIKSEGS
THPEYRISLAVSFLTFIFSSLANSLNESAKVSGTNEHSPEKQLKLDINDLPIRSRQEI
FFTDAYKPVGKAIKKAGVEIQASGEAVYVDDIPAFKDCLYGAFIYSTHAHVKSINF
KPSLASGKIITVITAKDIPSGGQNVGYSFMIGEEALFADPVAEFAGQNIGVVLAQTO
KYAYMAAKQAIIEYSTENLQPPLITIEDAIRRSSFFOTLPFVAPKPUGDYDKGMSEAD
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NVRVTTRRVGGGFGGKALKSMUVACACAVALKLQRPVRMYLDRXTDMIMAGGRHPMK
VKXSYGFKSNGKITALHDLGINGGISPDMSPMIAAPVIGSLKKYNNGNLAFDTKVCK
TNVSSKSSMRAPGDAQGSFIAEAIIEHVASALSADTWTIRKKUHDFESLAVFFGDSA
GEASTYSLVTMEDKLASSPEVGHRAENVEQFNRSNKWKKGISCVPVTYFEQULAPTGG
KVSINNDGSJAVEVGGCUELGGCLWTKVKOMTAFGLGGLGCESLLDKVRVIQADTL
KVSINNDGSJAVEVGGCUELGGCLWTKVKOMTAFGLGGLGCESLLDKVRVIQADTL
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1056 c 1138 g 1019
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LGQVEGAFVQGVGFFTNEEYATNSDGLVIHDGTWTYKIPTVDTIPKQFNVELINSARD
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/db_xref="pID:gZ589164"
/taanslation="MemokranAvvLAVNGKRYEAAGVDPSTTLLEFLRTHTPVRGPKL
/translation="MemokranAvvLAVNGKRYEAAGVDPSTTLLEFLRTHTPVRGPKL
GCGEGGGCGACVVLVSKYDPATDEVTEFSASSCLTLLHSVDRCSVTTSEGIGNTKDGYH
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Sekimoto,H.

Direct Submission

Submitted (19-CCT-1996) to the DDBJ/EMBL/GenBank databases.

Submitted (19-CCT-1996) to the DDBJ/EMBL/GenBank databases.

Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,

Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
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Zea mays mRNA for aldehyde oxidase*2, complete cds.
D88452
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aldehyde oxidase-2; zmAO-2.
Zea mays coleoptile cDNA to mRNA.
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Zea mays mRNA for aldehyde oxidase, complete cds.
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Aldehyde oxidase; zmAO-1.
SOURCE
ORGANISM
Eukaryotae; Viridiplantae; Charophyta/Embryophyta group;
Embryophyta: vascular plants; seed plants; Magnoliophyta;
AUTHORS
TITLE
JOURNAL
MEDERENCE
AUTHORS
TITLE
Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T.
AUTHORS
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Liliopsida; Poales; Poaceae; Zea.

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Sekimoto, H. of plant aldehyde oxidase
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Liliopsida; Poales; Poaceae; Zea.

MEDLINE
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Sekimoto, H.
TITLE
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AUTHORS
Liliopsida; Poales; Poaceae; Zea.

AUTHORS
Liliopsida; Poales; Poaceae; Zea.

J Biol. Chem. 272 (24), 15280-15285 (1997)
Sekimoto, H.

TITLE
JOURNAL
AUTHORS
Liliopsida; Poales; Poaceae; Zea.

AUTHORS
Liliopsida; Poales; Poaceae; Zea.

J Biol. Chem. 272 (24), 15280-15285 (1997)
Sekimoto, H.

TITLE
JOURNAL
Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
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Fax:+81-48-462-4691)
                                                                                                       Sekimoto,H., Seo,M., Dohmae,N., Takio,K., Kamiya,Y. and Koshiba,T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997)
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Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.
Hiroyuki Sekimoto, The Institute of Physical and Chemical Research Frontier Research Program; Hirosawa 2-1, Wako, Saltama 351-01, Japan (E-mail:sekimoto@postman.riken.go.jp, Tel:+81-48-462-1111,
                                                                                                                                                                                                                                                                                                                                                                             TKYTPRL 2707 bp mRNA VRT 30
Meleagris gallopavo prolactin receptor (tprir) mRNA,
L76587
                                                                                                                                                 Meleagris gallopavo female immature kidney cDNA to mRNA.
Meleagris gallopavo
Meleagris gallopavo
Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata;
Vertebrata; Archosauria; Aves; Neognathae; Galliformes;
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Sekimoto,H.

Direct Submission

Direct Submission

Submitted (19-CCT-1996) to the DDBJ/EMBL/GenBank databases.

Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
                                                                                                                                                   Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997)
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aldehyde oxidase; zmAO-1.
Zea mays coleoptile cDNA to mRNA.
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                                                                                                                                                                                                                                                                         g2589163
aldehyde oxidase-2; zmAO-2.
Zea mays coleoptile cDNA to mRNA.
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Zea mays mRNA for aldehyde oxidase-2, complete cds
D88452
Sekimoto, H.
                                             Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103
                                                                                                                                                                                                 Eukaryotae; Viridiplantae; Charophyta/Embryophyta group;
Embryophyta; vascular plants; seed plants; Magnoliophyta;
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TLEEFLEQPPCDSRTLLLSI FIPEMGSDYVTFETFERAAPRFEGANVSYVNSAFLARTS
GSLIIEDICLAFGA YGVUHAIRAK KVEDFIKGKSLSSFVILBAIKLIKOTVSPSEGTI
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HAHVRSINFKSSLASQKVITVITAKDIPSGGBNIGSSFLYNDDEALFADPIAEFAGONI
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RCLGIPFNNVRVISRRVGGGFGGKAMKATHTAGACALAAFKLRRPVRNYLDRKTDMIM
AGGRHPNKAKYSYGFKSDGKITALHLDLGINAGISPDVSPLMPRAIIGAKKYNWGTL
EFDTKVCKTNVSSKSANRAPGDYQGSFIABAIIEHVASALALDTUTVRRKNLHDFESL
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VNLRFFPGKVSIMNDGSIAVEYGGIEIQGLMTKVKOMTAFGLOCLCPDGGECLLDKV
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EMFNSAPDKKRVLSSKASGEPFLVLATSVHCAMREAIRARKEEFSVSTSPAKSAVTFQ
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CTFPEFLKSEIKSTMKQVNDVPIAASGDGWYHPKSIEELHRLFDSSWFDDSSVKIVAS
NTGSGVYKDQDLYDKYIDIKGIPELSVINKNDKAIELGSVVSISKAIEVLSDGNLVFR
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GPKLGCGEGGCGACVVLVSKYDPATDEVTEFSASSCLTLLHSVDRCSVTTSEGIGNTR
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/db_xref="taxon:4577"
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Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.
Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.
Hirosyuki Sekimoto, The Institute of Physical and Chemical Research,
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
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Fax:+81-48-462-4691)
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aldehyde oxidase; zmAO-1.
Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase
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GVYKDQDLYDKYIDIKGIPELSVINRNDKGIELGSVVSISKAIEVLSDGNLVFRKIAG
HLNKVASPFVRNTATIGGNIVMAQRLPFASDIATILLAAGSTVTIQVASKRLCFFLEE
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PVQQRLSGFHASQCGFCTPGMCMSIFSALVKADKAANRPAPPAGFSKLTSSEAEKAVS
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QKRYLSSKASGEPPLLLASSVHCAMREAIRAARKEFSVCTGPANSAITFQNDVPAIMP
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91. .4140
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Poales; Poaceae; Zea.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                    July 14, 1999, 23:44:50 ; Search time 4576.22 Seconds (without alignments) 18.762 Million cell updates/sec
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NEUEPIA HS179D3A AC004674 AF010496 AF019251 MAMANIRM PAU93274 PG1CFXXYEP RCU14593		ABO00758 AFACFXXYEC RCAPUCOA D86949 ABO00758 AFACFXXYEC RCAPUCOA RICG177A	D88451 D88451 AC005929 AGDNAKJGE PAU27829 PSEALGLA AGDNAKJGE PAU27829 PSEALGLA D90827 AE000277 A56817 HSMI2218 AC006064 D90827 AE000277 AE000277
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ACCESSION
                                                           JOURNAL
Sekimoto,H.

Direct Submission

Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.

Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,

Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
                                                                                                                                                                                                                                                                                                                            D88451 4382 bp mRNA
Zea mays mRNA for aldehyde ox
D88451
92589161 saldehyde oxidase; zmAO-1.
                                                                                                                                    Sekimoto,H., Seo,M., Dohmae,N., Takio,K., Kamiya,Y. and Koshiba,T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103
                                                                                                                                                                                                              Eukaryotae; Viridiplantae; Charophyta/Embryophyta group; Embryophyta; vascular plants; seed plants; Magnoliophyta; Liliopsida; Poales; Poaceae; Zea.
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aldehyde oxidase; zmAO-1.
Zea mays coleoptile cDNA to mRNA.
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D88451
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                                               97326103
                                                                       Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997)
     Sekimoto, H.
                                                                                                                                                                                                    Eukaryotae; Viridiplantae; Charophyta/Embryophyta group;
Embryophyta; vascular plants; seed plants; Magnoliophyta;
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GVVIAETQRYAMMAKQAVVEYSTENLQPPILTIEDAIQRNSYLÖIPPPLAFKEVGDY
NKGMAEDHKILSAEVKLESQYYFYMETQAALIPDEDNCITIYSSTQMPELIQNLIK
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AGGRHPMKAKYSVGFKSDGKITALHLDLGINAGISPDVSPLMPRAIIGALKKYNWGTL
EFDTKVCKTNVSSKSAMRAPGDVQGSFIAEAIIEHVASALALDINTVRRKNLHDFESL
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/db_xref="taxon:4577"
/tissue_type="coleoptile"
46. .4122
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GSLLIEDICLAFGAYGYDHAIRAKKVEDFLKGKSLSSFVETLEAIKLLKDTVSPSEGTT
HHEYRYSLAVSFLFSFLSSLANSSSAPSNIDTPNGSYTHETGSNVDSFBRHIKVDSUD
LPIRSROEMVFSDEYKPVGKPIKKVGAEIQASGEAVYVDDIPAPKDCLYGAFIYSTHP
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NTGSGVYKDQDLYDKYIDIKGIPELSVINKNDKAIELGSVVSISKAIEVLSDGNLVFR
KIADHLNKVASPFVRNTATIGGNIMMAQRLPFESDVATVLLAAGSTVTVQVASKRLCF
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/translation="MGKEAGAAESSTVVLAVNGKRYEAAGVAPSTSLLEFLRTQTPVR
GPKLGCGEGGCGACVVLVSKYDPATDEVTEFSASSCLFLLHSVDRCSVTTSEGIONTR
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46. .4122
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EMFNSAPDKKRVLSSKASGEPPLVLATSVHCAMREAIRAARKEFSVSTSPAKSAVTFQ
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LIAQASMASVNLSAQPYWTPDPSFKSYLNYGAGTSEVEVDILTGATTILRSDLVYDCG
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VNLRPTPGKVSIMNDGSIAVEVGGIEIGQGLWTKVKQMTAFGLGQLCPDGGECLLDKV
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Submitted (19-CCT-1996) to the DDBJ/EMBL/GenBank databases.
Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,
Japan (E-mail:sekimoto@postman.riken.go.jp, Tel:+81-48-462-1111,
                                                                                                                                                                                                                                                                                                                                                                                                     24;
                                                                                                                                                                               AC005929 44000 bp DNA HIGH PROGRESS *** Leishmania major chromosome 3 clone *** SEQUENCING IN PROGRESS *** Leishmania major chromosome 3 clone
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1 (bases 1 to 44000)
Myler,P.J., Sisk,E., Hixson,G., Kiser,P., Rickel,E., Hassebrock,M.,
Cawthra,J., Marsolini,F., Sunkin,S. and Stuart,K.D.
                                                                                          Leishmania major.
Leishmania major
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                                                                            Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
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DGYHPVQQRLSGFHASQCGFCTPGMCMSIFSALVKADNKSDRPDPPAGFSKITTSEAE
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LIAQASMASVNLSAQPYWTPDPSFKSYLNYGAGTSEVEVDILTGATTILRSDLVYDCG
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/EC_number="1.2.3.1"
/codon_start=1
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1061 c 1142 g 101
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/translation="MGKEAGAAESSTVVLAVNGKRYEAAGVAPSTSLLEELRTQTPVR
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/db_xref="PID:g2589162"
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/db_xref="taxon:4577"
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Zea mays mRNA for aldehyde oxidase-2, complete cds.
D88452
                                              o. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103
                                                                                    Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T Cloning and molecular characterization of plant aldehyde oxidase
                                                                                                                                                                                      Eukaryotae; Viridiplantae; Charophyta/Embryophyta group; Embryophyta; vascular plants; seed plants; Magnoliophyta;
                                                                                                                                                                                                                                                       Zea mays coleoptile cDNA to mRNA. Zea mays
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                     (bases 1 to 4333)
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HHEYRYGLAVSFLFSELANGSSAPSNIDT PAGSYTPIEATKLKDTYSSECTT
HHEYRYGLAVSFLFSELANGSSAPSNIDT PAGSYTPIETGSNVDSPERHIKVDSND
LPIRSRQEMVFSDEYKPYGKPIKKYGAEIQAGGEAVYDDITPAFKDCLYGAFIYSTHP
HAHVRSINFKSSLASQKYITVITAKDIPSGGENIGSSFLMQGEALFADPTAFFAGONI
GVVIAETQRYAMMAAKQAVVEYSTENLQPPILTIEDAIQRNSYIQIPPFLAPKPVGDY
NKGMAEADHKILSAEVKLESQYYFYMETQAALAITDEDMCITIYSSTQMPELTQNLIA
RCLGIPPHNYKYISTRYVGGGGGXAMKATHTACACALAAFKLRREYRMYLDRKTDMIM
AGGRIPPMKRYSTRRYGGGGGXAMKATHTACACALAAFKLREYRMYLDRKTDMIM
AGGRIPPMKRYSTGFKSDGKITALHLDLGINAGISPDVSPLMPRAIIGALKKYNMGTL
EFDTKVCKTNVSSKSAMAAPGDVGGSFTAEAIITHEOPNSSNKKKKGTGSCVPATYE
VYLRPTPGKVSIMNDGSIAVEVGGIEIGGGLMTKVKQMTAFGLGGLCPDGGECLLDKV
RVIQADTLSLIGGGMTAGSTTSCETSCETYRQSCVALVEKUPIKESLEAKSNTVEWSA
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KIADHLNKVASPFVRNTATIGGNIMMAQRLPFESDVATVLLAAGSTVTVQVASKRLCF
TLEEFLEQPPCDSRTLLLSIFIPEWGSDYVTFETFRAAPRPFGNAVSYVNSAFLARTS
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1061 c 1142 g 101
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EMFNSAPDKKRVLSSKASGEPPLVLATSVHCAMREA1RAARKEFSVSTSPAKSAVTFQ
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CTFPEFLKSEIKSTMKQVNDVPIAASGDGWYHPKSIEELHRLFDSSWFDDSSVKIVAS
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Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T Cloning and molecular characterization of plant aldehyde oxidase
                                                                                                         Eukaryotae; Viridiplantae; Charophyta/Embryophyta group; Embryophyta; vascular plants; seed plants; Magnoliophyta.
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aldehyde oxidase; zmAO-1.
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                                                                                          Liliopsida; Poales; Poaceae; Zea.
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GVYKOODLYDKYIDIKGIPELSVINRNDKGIELGSVVSISKAIEVLSDGNLVFRKIAG
HLNKVASPEVRNTATIGANIVAKAGRIPFASDJANILLKASGSTVTIQVASKRLCFTLEE
FLQQPEDDSRTLLSIFIPEMGSONDVIETETFRAAPRELGNAVSYVNSAFLARTSLDAA
SKDHLIEDICLAFGAYGADHAIRARKVEDYLKGKTVSSSVILEAVRLLKGSIKPSGS
THPEYRISLAVSFLFTFLSSLANSLNESAKVSGTNEHSPEKQLKLDINDLPIRSRQEI
FTDAXKPUGKAIKKAGVEIQABAIRARKVUDDIPAPKDCLYGAFIYSTHPHAHVKSINF
KPSLASQKIITVITAKOIPSGGONVGYSFMIGEBALFADPVARFAGONIGVLTAQTQ
KYAYMAAKQAIIEXSTENLQPPLITIEDAIERSSFFOTLFVAPKPUGDYDKGMSEAD
HKILSAEVKIESQYFFYMEPQVALAIPDENCITIYFTAPKPUGDYDKGMSEAD
HKILSAEVKIESQYFFYMEPQVALAIFDENCITIYFTAPKTDMIMAGGRHPMK
VKYSVGFKSNGKITALHIDLGINGGISPDMSPMIAAPVIGSLKKYNWGNLAFDTKVCK
TNVSSKSSMRAPGDAQGSFIABAIEHBYASALSADINTIRKKNLHDFESSLAVFFGDSA
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KVSINIDGSIAVEVGGVELGOGLWTKVKQMTAFGLGQLCPGGGESLLDKVRVIQADTL
SMIQGGVTGGSTTSETSCEAVEKSCVALVESLKPIKERNEAKTGTVEWSALIAQASMA
SVNLSAHAYWTPDPTFTSYLNYGAGTISEVEIDVLTGATTILRSDLVYDCGGSLNPAV
LGQVEGAFVQGVGFFTNEEYATNSDGLVIHDGTWTYKIPTVDTIFKQFAVELINSARD
QKRVLSSKASGEPPLLLASSVHCAMREAIRAARKEFSVCTGPANSAITFQMDVPATMP
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PVQQRLSGFHASQCGFCTPGMCMSIFSALVKADKAANRPAPPAGFSKLTSSEAEKAVS
GNLCRCTGYRPIVDACKSFAADVDLEDLGLNCFWKKGDEPADVSKLPGYNSGDVCTFP
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1056 c 1138 g 101
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/translation="MEMGKAAAVVLAVNGKRYEAAGVDPSTTLLEFLRTHTPVRGPKL
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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18.762 Million cell updates/sec
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JOURNAL MEDLINE REFERENCE REFERENCE AUTHORS TITLE DEFINITION ACCESSION RESULT D88451/c LOCUS SOURCE ORGANISM KEYWORDS NID TITLE JOURNAL AUTHORS sekimoto,H.

Direct Submission

Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.

Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.

Hiroyuki Sekimoto, The Institute of Physical and Chemical Research,

Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01, Zea mays
Eukaryotae; Viridiplantae; Charophyta/Embryophyta group;
Embryophyta; vascular plants; seed plants; Magnoliophyta;
Liliopsida; Poales; Poaceae; Zea. D88451 4382 bp mRNA PLN Zea mays mRNA for aldehyde oxidase, complete cds. D88451 Sekimoto, H., Seo, M., Dohmae, N., Takio, K., Kamiya, Y. and Koshiba, T. Cloning and molecular characterization of plant aldehyde oxidase J. Biol. Chem. 272 (24), 15280-15285 (1997) 97326103 g2589161 aldehyde oxidase; zmAO-1. Zea mays coleoptile cDNA to mRNA. (bases 1 to 4382) 10-NOV-1997

Result No.

Query Score Match Length DB

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Description

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Result
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    US-08-391-615-1
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PCT-US93-03077-2
PCT-US93-03077-4
PCT-US95-17026-1
US-08-136-74394-2
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US-08-136-724-394A-2
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US-08-306-591B-19
US-08-306-591B-19
US-08-306-591B-19
US-08-108-306-325A-7
US-08-286-325A-7
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TGCTTTGCAGCCATATTAGCATATCT	atch cal s	SEGULT 1  S-08-391-615-1/c  Sequence 1, Application US/08391615  Sequence 1, Application US/08391615  Sequence 1, Application US/08391615  Sequence 1, Application US/08391615  Patent No. 5550054  APPLICANT: Witte, Owen Applicant: Saffran, Douglas Courrex: USA  ZIP: 9411-4187  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC Compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Datenth Release #1.0  CURRENT APPLICATION NUMBER: US/08/391,6  FILING DATE: 20-DOS/MS-DOS SOFTWARE: PATENTION DATA: APPLICATION NUMBER: US/08/391,6  FILING DATE: 21-JAN-1993  ATTORNEY/AGENT INFORMATION: TREEPHONE: (415) 781-1989  TELEFAN: 910 277299 FHT UR REGISTRATION FOR SEQ ID NO: 1:  REGISTRATION FOR SEQ ID NO: 1:  SEQUENCE CHARACTERISTICS: LENGTH: 2505 base pairs TYPE: nucleic acid STRANDEDNESS: double TOPOLOGY: linear MOLECULE TYPE: CDN  FATURE: NAME/KEY: CDS LOCATION: 1372116		14.8 14.8 14.8 14.8 14.8 14.8
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ATATTAGO	60.7 76.9 7ative	ication US/08391 54 47 TION: Itte, Owen sirte, Owen sukada, Satoshi affran, Douglas awlings, David NTION: FLEHR, HOHBACH, Embarcadero Cent Francisco ifornia SA BELE FORM: Floppy disk IBM PC compatibl YSTEM: PC -DDS/M PatentIn Release CATION DATA: NUMBER: US/08/ : 10N: 435 TION DATA: NUMBER: US/08/ : 21-JAN-1993 TION DATA: NUMBER: QS 08/ : 21-JAN-1993 TION DATA: NUMBER: QS 08/ : 21-JAN-1993 TION INFORMATION: and, Bertram I NUMBER: QS 08/ 11-1889 415) 398-3249 277299 FHT UR SEQ ID NO: 1: ACTERISTICS: 05 base pairs seic acid		15101 3226 38 87 87 87 3226 5470 7360
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                                                    Sequence 1, Application US/08910973 Patent No. 5795723
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                                       GENERAL INFORMATION:
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APPLICATION NUMBER: US 08,
FILING DATE: 06-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCI
FILING DATE: 08-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Weintrau, ....
APPLICANT: Lee, Jacqueline E.
APPLICANT: Tapscott, Stephen J.
APPLICANT: Hollenberg, Stanley M.
APPLICANT: TAVENTION: Neurogenic Differentiation (NeuroD) Genes
                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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APPLICANT: Tapscott, Stephen J. APPLICANT: Olson, James M.
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ORIGINAL SOURCE:
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CORRESPONDENCE ADDRESS:
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Local Similarity 85.7%;
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LOCATION:
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REFERENCE/DOCKET NUMBER: FHCR-1-8933
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Pred. No. 42;
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Best Local
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INFORMATION FOR SEQ ID NO: 1:
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APPLICATION NUMBER: WO PCT
FILING DATE: 08-MAY-1995
PRIOR APPLICATION NUMBER: PCT/US
APPLICATION NUMBER: PCT/US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,973
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Christensen O'Connor Johnson KindnessPLLC
STREET: 1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                 1403
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 30-October-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sheiness, Diana K.
                                                                                                                                   APPLICANT: Board of Regents, The Universityof Texas System APPLICANT: Gaynor, Richard B.
APPLICANT: Wu, Foon Kin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold White & Durkee
                                                                                       TITLE OF INVENTION: PROTEIN CELLULAR FACTOR USEFUL FOR TITLE OF INVENTION: REGULATING GENE EXPRESSION NUMBER OF SEGUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
ORIGINAL SOURCE:
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PRIOR APPLICATION DATA:
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GenCore version 4.5 Copyright (c) 1993 - 1998 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 15, 1999, 00:27:44; Search time 269.22 Seconds (without alignments)
18.868 Million cell updates/sec

Title: Perfect score: US-08-943-144-9 27

1 TGGCTGCAGATTTTCTGTGCTATACTC 27

Scoring table: IDENTITY\_NUC

Searched: 240622 segs, 94065609 residues

Database : N\_Geneseq\_34:\*

pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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V40710/c

V40710 standard; cDNA to mRNA; 4412 BP.
AC V40710;
DT 22-SEP-1998 (first entry)
DE Aldehyde oxidase gene.
KW Aldehyde oxidase; auxin production; plant
OS Zea mays.
Location/Qualifiers
FH Key 46.4122
FT CDS /\*tag- a
PN EP-834558-A2. /\*tag- a
PN EP-834558-A2. /\*tag- a
PN 62-OCT-1997; 117168.
PF 02-OCT-1997; 117168.
PR 04-OCT-1996; JP-283314.
PA (SUMO) SUMITOMO CHEM CO LTD.
PR Koshiba T;
DR WPI; 98-195460/18.
DR P-9SDB; W57837.
PT Cells - particularly for modulating auxin 멍 Š Query Match 100.0%; Score 27; DB 1; Length 27; Best Local Similarity 100.0%; Pred. No. 0.00038; Matches 27; Conservative 0; Mismatches 0; Indels EP-834558-A2.

08-APR-1998.

02-OCT-1997: 117168.

04-CCT-1996: JP-283314.

(SUMO ) SUMITOMO CHEM CO LTD.

Koshiba T;

WPI; 98-195460/18.

P-PSDB: W57837.

Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to 22-SEP-1998 (first entry)
Aldehyde oxidase gene.
Aldehyde oxidase; aunn production; plant maturation; ss.
Zea mays. 0 Gaps 0

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Claim 3: Page 17-21; 34pp; English.

CC This sequence encodes the Zea mays aldehyde oxidase protein of the CC invention. The enzyme is able to oxidise an aldehyde to carboxylic acid CC (specifically indole acetaldehyde to indole acetic acid (auxin). Cells CC transformed with the DNA are used to express the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or CC suppress) production and activity of auxin, e.g. to cause earlier cc maturation of crops, improved yields and quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, CC to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten CC differentiated and regenerated in sterile meddium, particularly for CC differentiated and regenerated in sterile meddium, particularly for CC production of virus-free nursery stock (of flowers or ornamental plants).

Sequence 4412 BP; 1193 A; 1061 C; 1142 G; 1016 T;
                                                                                                                                                                                                                                                                              PT Aldehyde oxidase gene from plants and related vector and transformed procells - particularly for modulating auxin production in plants to reals - particularly for modulating auxin production in plants to proceed the care accelerate maturation, increase yield, induce dwarfing etc.

CT his sequence encodes the Zea mays aldehyde oxidase protein of the CC invention. The enzyme is able to oxidise an aldehyde to carboxyllc acid (specifically indole acetaldehyde to indole acetic acid (auxin). Cells CC transformed with the DNA are used to indole acetic acid (auxin). Cells CC transformed with the DNA are used to express the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or compress) production and activity of auxin, e.g. to cause earlier CC transformed for proved yields and quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten for production of virus-free nursery stock (of flowers or ornamental plants). Sequence 4359 BP; 1146 A; 1056 C; 1138 G; 1019 T;
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02-OCT-1997; 117168.
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Example 8; Page 7; 34pp; English.

CThis sequence represents a primer for the DNA encoding the zea mays called a cells protein of the invention. The enzyme is able to oxidise an aldehyde oxidase protein of the invention. The enzyme is able to oxidise an aldehyde oxidase protein of the invention. The enzyme is able to oxidise can aldehyde to carboxylic acid (specifically indole acetaldehyde to compare the compare of the DNA are used to carboxylic acid (specifically indole acetaldehyde to compare the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or suppress) production and activity of cauxin, e.g. to cause earlier maturation of crops, improved yields and condition of the compare of the conditions to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten flowers. Also plant cells that over-express the medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants).
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                                                                                                                                                                                                                                                               Streptococcus pneumoniae. W09818931-A2. 07-MAY-1998. 30-OCT-1997; U19588. 31-OCT-1996; US-029960.
                                                               Claim 1; Page 1209-1211; 1409pp; English.

The present invention describes a computer readable medium which has the nucleotide sequences SEQ ID NO:1 to 391 (V52134 to V52524) recorded the nucleotide sequences SEQ ID NO:1
                                                                                                                                     Computer-readable medium with recorded Streptococcus pneumoniae polynucleotide sequences - useful in diagnostic kits and assays, pharmaceutical compositions and vaccines for Streptococcus
                                                                                                                                                                                                                                                                                                                                                  Streptococcus pneumoniae genome fragment SEQ ID NO:212. Streptococcus pneumoniae; S. pneumoniae; genome; diagnosis; assay; computer readable medium; vaccine; pharmaceutical composition; ds.
                     to SEQ ID NO:
to 391 (V52134
                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI IN
Barash SC, Choi GH, Dillon
Kunsch CA, Rosen CA;
 pneumoniae. The present invention also describes an isolated
                                                                                                                                                                                               WPI; 98-272225/24.
                                                                                                                                                                                                                                                                                                                                                                                                       V52345;
23-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                           V52345 standard; DNA; 3902 BP.
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              or a representative fragment or a sequence at least 95% ide ID NO: 1 to 391. The nucleotide sequences depicted in SEQ I (V52134 to V52524) are genomic fragments from Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for aldehyde oxidase gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or ornamental plants).
e 27 BP; 4 A; 6 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             auxin production; plant maturation; PCR primer; ss.
                                                                                                                                                                                                          SCI INC.
Dillon PJ, Dougherty BA, Fannon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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nucleic acid
                                                   recorded identical
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                                  ID NO:1
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V RESULT VE SULT VE SU
                                                                                                                                                                                                                                                   This DNA encodes S. pneumoniae nitrate reduction, formate dependent protein, lackepressor and a nucleotide reductase. The invention provides DNA sequences (V65201 to V65304) from the S. pneumoniae genome and corresponding protein sequences (W80605 to W80728). A recombinant host containing a vector comprising any of the above nucleic acids can be used for the recombinant expression of the protein sequences. The invention also provides a DNA chip having arrayed on it at least 15 base pair fragment of any one or more of these DNA sequences. The DNA chip can be used methods for evaluating gene expression in S. pneumoniae and for identifying virulence genes in S. pneumoniae that selectively bind to the above proteins or peptide fragments can be used to treat S. pneumoniae infection. The antibodies can also be used to detect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         molecule encoding a homologue of any of the fragments of the S.pneumoniae genome (SEQ ID NO:1 to 391) where the nucleic acid molecule is produced by a process comprising: (a) screening a genomic DNA library using as a probe a target sequence defined by any of the sequences in SEQ ID NO:1 to 391, identifying members of the library which contain sequences that hybridise to the target sequence and isolating the nucleic acid molecules from the members; or (b) isolating mRNA, DNA or cDNA produced from an organism, amplifying nucleic acid molecules whose nucleotide fragment of the S. pneumoniae genome to prime the amplification and isolating the amplified sequences. The computer readable medium can be used in a computer-based system for identifying fragments of the S. pneumoniae genome. Products from the present invention can be used in diagnosis kits and assays, and pharmaceutical compositions and vaccines for S. pneumoniae.

Sequence 3902 BP: 1138 A; 714 C; 834 G; 1216 T;
                                                                 Matches
                                                                                          Query Match
Best Local Similarity
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Best Local
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Claim 1;
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Streptococcus pneumoniae nucleic acid sequences - used in DNA chips
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
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Baltz RH, Burgett SG, Dehoff BS, Hoskins JA, Jaskunas SR,

Mills BJ, Norils FH, Peery RB, Rockey PK, Rosteck PR,

Skatrud PL, Smith MC, Solenberg PJ, Treadway PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding three S. pneumoniae proteins with different functions. Streptococcus pneumoniae protein; recombinant; gene expression; DNA chip; virulence; antibody; infection; detection; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Young
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-DEC-1997; U22578.
13-DEC-1996; US-036281.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Streptococcus pneumoniae. WO9826072-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-DEC-1998 (first er DNA encoding three S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 V65242 standard; DNA; 3189
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GGCTGCAGATTTTCTGTGCTATACTC
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                                                                 Conservative
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                                                                                             Score
Pred.
                                                                 Mismatches
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                                                                                                 No.
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                                                                 Indels
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RESULT
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Best Local
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WPI; 96-443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA encoding human papilloma virus 18, esp. L1 and L2 capsid proteins - and related vectors and antibodies, useful in protective proteins, for serotyping HPV infections and as therapeutic agents Claim 2: Fig 1: 46pp; English.

The L1 gene (T40119) codes for the major capsid protein (W05843) of human papillomavirus type 18 (HPV18), an HPV type associated with invasive carcinomas of the cervix, vagina, vulva and snal canal. The DNA sequence was deduced from a genomic clone isolated from human cervical carcinoma-derived SW756 cells using an HPV18 L1 probe. The HPV18 L1 and L2 (see also T40120) genes can be used to the capture of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T91248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1154 CTGCAGATGTTATGTCCTATATTC 1177
                                                                                                                                                                                                                                                                                                                                                                                                                     Human papilloma virus HPV-18 DNA sequence for generating probes.
Human papilloma virus; HPV; probe; isolation; detection; hybridise;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T40119
                                           misc_feature
                                                                                                        misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                  Key
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in vaccines against HPV18 infection, as probes, or to recombinant capsid proteins in host cells.

Sequence 1524 BP; 396 A; 292 C; 337 G; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-SEP-1996.
18-MAR-1996; U03649.
22-MAR-1995; US-409122.
22-MAR-1995; US-408669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9629413-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antibody; serotyping; cervix carcinoma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HPV-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                      Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MERI ) MERCK & CO INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 CTGCAGATTTTCTGTGCTATACTC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTTCCGACTTTTTGTGCGATACTC
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                                                                                                                                                                                                                                                                                                                                                                                                      papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; DNA; 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; DNA; 1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             apillomavirus type 18 L1 capsid protein gene. L1 gene; capsid protein; vaccine; diagnosis;
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                                         /"cag" e
/note= "claimed |
193. .284
                                                                                                                                                            /*tag= c
/note= "claimed;
121. .139
                                                                                                                                                                                                                                                                                               /note=
25. .67
                                                                                                      /note- "claimed
163. .191
/note- "claimed probe for HPV-18
                                                                                                                                               /*tag=
                                                                                                                                                                                                                                  70. .119
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83.3%;
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"claimed probe
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Pred. No. 18;
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                                                               for
                                                                                                                                                                                                                                                                                                                 for HPV-18"
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                                                                                                                                                                                                                                                      for HPV-18"
                                                               HPV-18'
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RESULT
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DE Sequ
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PM HANS
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DR WPI;
PT Phos
CC Inis
CC Inis
CC Anin
CCC Stry
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Best Local S
Matches 20
Phosphoenol pyruvate carboxy-kinase promoter use for dietary and hormonal regulation of expression of exogenous genes in transgenic animals. Disclosure; fig.6; 65pp; English.

This sequence is that of the phosphoenol pyruvate carboxylase kinase (PEPCK) promoter. It is operably linked to a non-PEPCK structural gene in the construction of chimeric expression unit for use in a transgenic animal. This way deficient genes can be introduced easily and effectively. (eg thyroid releasing hormone in the treatment of diabetes). Since it is an inducible promoter it can be used to control the expression of structural genes by eg changes in diet (protein:CHO ratio). Sequence 621 BP: 155 A; 178 C; 151 G; 137 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a DNA sequence specific to a human papilloma virus (HPV) which is used to generate specifically claimed probes (see features table). The probes can be used to hybridise to the homologous regions of the specific HPV. The probes can also be used to generate probes with nucleotide substitutions, which will hybridise to newly discovered variant regions of HPV. The probes are useful for the isolation and detection of HPV nucleic acid sequences. Sequence 455 BP; 125 A; 77 C; 87 G; 153 T;
                                                                                                                                                                           Hanson
WPI; 89
                                                                                                                                                                                                                                                                                    exogeneous gene expression;
                                                                                                                                                                                                                                                                                                 Sequence of phosphoenol pyruvate carboxylase kinase promoter. Phosphoenol pyruvate carboxy kinase promoter; transgenic animals;
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                                                                                                                                                                        29-DEC-1988. U01943.
13-JUN-1988; U01943.
(EDIS-) Edison Animal BiOote.
Hanson RW, McGrane M, Wynshaw BA, Short J, Hatzoglou WPI; 89-023847/03.
                                                                                                                                                                                                                                                                                                                                                              N93068 standard; DNA; 621 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid probes for detection of homologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9739010-A1.
23-OCT-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 22-23; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Manos MM, Wheeler CM;
                                                                                                                                                                                                                                                                                                                                    29-JUN-1989
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15-APR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 CTGCAGATTTTCTGTGCTATACTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCAGATGTTATGTCCTATATTC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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/note= "claimed
387. .428
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/note= "claimed
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                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human papilloma virus - for isc
or variant regions of DNA from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE
                                                                                                                                                                                                                                                                                      SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 17.6;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for isolation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         different
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                                                                                                                                                                                             Disclosure; Fig 13; 75pp; English.

Explicational, was used underly the sequences given in 031878-80 represents the cyclin D1 to D3

CC promoters. These sequences were identified during the isolation of CC the D-type cyclin cD1As from a normal human liver genomic library.

CC cyclin cD1As from a normal human liver genomic library.

CC (CIN 1 and CIN 2) were inactivate and expression of the third was cc conditional, was used to identify human cD1A clones that rescue yeast conditional, was used to identify human cD1A clones that rescue yeast conditional. Two yeast expression vector (pADNS) was introduced into a mutant yeast consistent. Two yeast transformants (pCCD1-21 and pCCD1-19) which grew conditions were identified and recovered in E. coli. These two cc revertants, were identified and recovered in E. coli. These two cc lones were shown to be independent clone representing the same gene.

A HeLa cDNA library was screen for a full length cDNA clone using the close were designed using the D1 gene sequence isolated by this method was pCYCD1-412 (see also Q31873). Degenerate probes and cc machines were used in the isolation of the cyclin D2 and D3 genes. Cc and probes were used in the isolation of the cyclin D2 and D3 genes. Cc and probes were used in the isolation clone was used to screen a cc liver genomic library resulting in the identification of three coupstrive clones. These clones were shown to correspond to the cyclin D1. Human cyclin promoters D2 and D3 were isolated in the same consistent cell types. With expression being highest in cells of neural confidence with the same shown to be expressed differentially in confidence with expression being heing highest in cells of neural confidence is the confidence of the cyclin D2 and D3 genes.
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Best Local
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Best Local :
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22-APR-1993 (first entry)

Cyclin D3 promoter.

Cyclin; D1; D2; D3; promoter; human; liver; genomic library; clone; cyclin; D1; D2; D3; promoter; human; liver; genomic library; strain; upstream; exon; intron; neural; pCYCD1-H12; mutant; yeast; strain; upstream; exon; intron; neural; pCYCD1-H12; mutant; cDNA library; CLN; cyclin; gene; CLN 1; CLN 2; human; glioblastoma; cDNA library; expression vector; pADNS; transformant; pCYCD1-21; pCYCD1-19; HeLa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Recombinant mammalian D-type cyclin - replaces a CLN-type protein essential for cell start in budding yeast, its antibodies and probes being useful in detecting D-type cyclin in biological
                                                                                                                                             Sequence
                                                                                                                                                                origin
                                                                                                                                                                                     different
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAY-1992; U04146.
16-MAY-1991; US-701514.
(COLD-) COLD SPRING HAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q31880 standard;
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  TGGCTGCAGATTTTCTGTGCTATAC 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGCTGCACATTTTGTGTGCCA 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19;
                                            20;
                                                             Similarity
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                                                                                                                                                                                     cell types, with expression being highest in cells of
                                                                                                                                             3158 BP;
                                            Conservative
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                                                      63.0%;
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                                                                                                                                             952 A;
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                                                        Score 17;
Pred. No.
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Pred.
                                            Mismatches
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                                                                                                                                             674 C;
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No. 24;
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                                                                                Length 3158
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RESULT 11 Q53212/c ID Q53212 standard;

DNA;

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2498

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Best Local
Claim 4; Page 14; English.

(67458 codes for a newly isolated tau-protein kinase I enzyme (TPK-1), shown in R61326 (compare to rat R61327). The cDNA was cloned from a rat fetus brain cDNA library, and was expressed in insect cells. TPK-I acts specifically on tau-protein, which is thought to be involved in Alzheimer's disease (AD) and senile dementia of the AD type. It is hoped that the characterisation of TPK-I may lead to development of new agents for the prevention and therapy of these diseases.

Sequence 2088 BP; 656 A; 452 C; 434 G; 546 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2498
                                                                                                                                   Newly isolated tau-protein kinase I enzyme - with specificity tau-protein providing means for prevention and treatment of Alzheimer's disease
                                                                                                                                                                                                     Takashima A;
                                                                                                                                                                                                                                                    01-MAR-1994; 103057.
02-MAR-1993; JP-041160.
22-MAR-1993; JP-085143.
02-AUG-1993; JP-191246.
                                                                                                                                                                                                                                                                                                                                               mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                         Tau-protein kinase I enzyme;
                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1995 (first entry)
Codes tau-protein kinase I (TPK-I),
                                                                                                                                                                                                                                                                                                                                                                                                                                          Q67458 standard; cDNA to RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Fig 13; 108pp; English. The sequence is that of human cyclin Sequence 3158 BP; 952 A; 674
                                                                                                                                                                                    WPI; 94-287181/36.
                                                                                                                                                                                                               (MITU ) MITSUBISHI KASEI CORP.
Hoshino T, Imahori K, Saito K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New D-type mammalian cyclin - replaces CLN-type protein needed for cell start in budding yeast and is detected by antibodies of the start in biological samples to determine abnormal cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beach DH;
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25-MAY-1993; U05000.
26-MAY-1992; US-888178.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cyclin D3 promoter D-type; mammalian; CLN p
                                                                                                                                                                                                                                        (TAKA/) TAKASHIMA A.
                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 93-405720/50.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TGGCTGCAGATTTTCTGTGCTATAC 25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; mammalian; CLN protein; protein deficiency; cell cycle start; complement; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 616. .1885
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            2088 BP
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                                                                                                                                                                                                                                                                                                                                                                                      Alzheimer's disease.
Alzheimer's disease;
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722 G;
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TRESULT

ID 55401

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                                                                                                                                                                                                                                                                                  RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC present sequence represents a synthetic gene segment from an example of CC the present invention. The new synthetic JNA sequence induces anti-HIV cc neutralising antibody, HIV specific T cell immune responses or CC protective immune responses upon introduction into vertebrate tissue, CC including human tissue in vivo, where the DNA comprises a gene encoding CC a HIV gag, gag protease or env gene product. The DNA can also be used to induce an immune response against infection or disease caused by CC virulent strains of HIV, optionally in conjunction with attenuated HIV, CC killed HIV or HIV env, gag or pol protein, or to induce an anti-HIV CC response in a primate when administered parenterally in conjunction CC with interleukin 12. The new DNA can also be used to induce an anti-gen presenting cell to stimulate cytotoxic and helper T cell proliferation CC and effector functions, including lymphokine secretion specific to HIV CC antigens, by expressing vertebrate cells to it in vivo, or as a vaccine as to use the codons preferred by the projected host cell.

Sequence 387 BP; 91 A; 102 C; 113 G; 81 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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Best Local
                                                                                                                                 V21766;
20-JUL-1998
HIV gp32 (op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             against infection
Example 11; Page 57; 82pp; English.
The present specification describes a synthetic DNA sequence encoding human immunodeficiency virus (HIV) env protein, or a fragment, comprising codons optimised for expression in a mammalian host. The
                               env protein;
Synthetic.
                                                                                HIV gp32 (opt) gene segment from AvrII site. VlJneo; HIV vaccine; codon usage optimisation; HIV; human immunodeficiency virus; hepatitis; tuberculos:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gp32 (opt) syntheti
Human; tissue-speci
Human immunodeficiency virus
                                                                                                                                                                                                                           V21766 standard; DNA;
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Synthetic DNA encoding HIV env protein
optimised for expression in mammalian h
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Davies M, Freed DC, Liu MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9731115-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus.
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tissue-specific plasminogen activator; tPA;
on; HIV; env; human immunodeficiency virus;
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                                                      gp32; recombinant;
                                                                                                                                                                    (first entry)
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mammalian host, useful as vaccin
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Pred. No.
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37;
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27;
                                                                                      tuberculosis;
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CC This is a HIV gp32 gene segment from the AvrII site to the end of gp143 CC having optimal codon usage (opt) for expression. This can be used in an CC expression vector for vaccine production. The expression vector contains CC a new synthetic DNA, encoding a HIV env protein or its fragment and has CC codons optimised for expression in a non-homologous host. The synthetic DNA sequences are used to increase production of recombinant protein and CC induce anti-HIV neutralising antibody, HIV-specific T-cell immune CC responses or protective immune responses in vertebrates, specifically as CC UNA sequences. Optimisation of codons results in increased expression of CC the DNA in the host. The DNA induces antigen-presenting cells to CC stimulate cytotoxic and helper T-cells, and effector functions such as CC lymphokine secretion specific to HIV antigens. Cross-strain protection is CC achieved without use of adjuvant and the synthetic DNA may provide a CC codons rarely used in mammals, so optimisation will allow this gene to be expressed efficiently in absence of rev. The DNA sequences, more
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Best Local
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05-JUL-1990; 548138.
06-JUN-1995; US-470179.
05-JUL-1990; US-548138.
13-AUG-1993; US-106482.
(UTAH ) UNIV UTAH RES FOU
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24-DEC-1997.
17-JUN-1996; GB-014943.
21-JUN-1996; US-020165.
21-JUN-1996; US-020166.
16-JUL-1996; GB-014942.
(MERI ) MERCK & CO INC.
Detection and identification of organisms - using DNA primers to amplify signature segment of organism's type II topoisomerase Claim 6; Column 71-72; 114pp; English.

A method has been produced for selectively amplifying DNA segments of one or more species of organisms in a sample. The method involves: (a) providing a database containing reference sequences, comprising a subunit sequence of a signature region of a macromolecule selected from a type II topoisomerase (TopoII), or a homologue, where each reference sequence is specific to a different species of a chosen group, and the macromolecule comprises 1st and 2nd conserved regions adjacently flanking the signature region; and (b) making an extract of DNA
                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            animal; plant; soil; v
Chlamydia trachomatis.
US5645994-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Type II topoisomerase database reference sequence Detection; identification; TopoII; contamination; animal; plant; soil; water; PCR; polymerase chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  generally, may express antigens from many other pathogens, or tuberculosis, and also from tumours.
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Pred. No.
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27;
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                                                                                 Query Match
Best Local :
                                                                   Matches
                                                                                                                                                              molecules, and selectively amplifying DNA seyments of the profile of the first and primer composition, comprising a primer constructed to bind a DNA encoding the macromolecule, to produce amplified DNA segments. The present sequence represents a DNA fragment containing a signature segment which is used in the database as a reference sequence for Chlamydia trachomatis. The method can be used to identify all of the different organisms present in a single sample without using multiple probes. It can accurately distinguish among similar and related species, and can be used with, e.g. contaminated food products, tissue or fluid samples from diseased humans, animal or plants, soil samples and water samples from any
                                                                                                                                                   Sequence
87
                                5 TGCAGATTTTCTGTGCTATACTC
TGCGCATTTTCTGTGCTTTGCTC
                                                                                 Similarity
                                                                                                                                                       422 BP;
                                                                   Conservative
                                                                                 61.5%;
                                                                                                                                                       121 A;
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65
                                                                                Score 16.6;
Pred. No. 42;
                              27
                                                                   Mismatches
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Search completed: July 15, 1999, 00:27:46 Job time: 7699 sec

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16.4 16.4

1131 1450

V12775 V16886

Human prostate can Metal-regulated tr

ALIGNMENTS

GenCore version Copyright (c) 1993 - 1998 4.5 Compugen Ltd.

OM nucleic - nucleic search, using sw model

95:: July 15, 1999, 00:27:39 ; Search time 269.22 Seconds (without alignments)
19.566 Million cell updates/sec

Perfect score: US-08-943-144-8 28

Sequence: GATTGCTGAAACACAAAGATATGCTAAT 28

Scoring table: IDENTITY\_NUC

240622 segs, 94065609 residues

Database : N\_Geneseq\_34:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

421	C C 37 0	0 23333333 75423210	C 222554	15 c 16 c 19 c 20 c 22 c 22		0000	Result
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PT Aldehyde oxidase gene from plants and related vector and transformed procedured particularly for modulating auxin production in plants to procedurate maturation, increase yield, induce dwarfing etc.

Claim 3; Page 17-21; 34pp; English.

CC Invention. The enzyme is able to oxidise an aldehyde to carboxylic acid (specifically indole acetaldehyde to indole acetic acid (auxin). Cells (specifically indole acetaldehyde to indole acetic acid (auxin). Cells cransformed with the DNA are used to express the enzyme. Specifically cexpression of the DNA in transformed plants is used to increase (or cuppress) production and activity of auxin, e.g. to cause earlier caturation of crops, improved yields and quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, compared to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten condicterentiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants). Sequence 4412 BP; 1193 A; 1061 C; 1142 G; 1016 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                            Zea mays.
EP-834558-A2.
08-APR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-SEP-1998 (first entry)
Primer for aldehyde oxidase gene.
Aldehyde oxidase; auxin production; plant maturation; PCR primer; ss.
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02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
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V40710;
22-SEP-1998 (first entry)
Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to accelerate maturation, increase yield, induce dwarfing etc.
                                                                                                                                                            (SUMO ) SUMITOMO CHEM CO LTD. Koshiba T; WPI; 98-195460/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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CDS
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                                                                                                                                                                                                                                                                                                              02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; W57837.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers 46. .4122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 28; DB 1; 100.0%; Pred. No. 0.0016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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Example 8; Page 7; 34pp; English.

CC This sequence represents a primer for the DNA encoding the Zea mays CC aldehyde oxidase protein of the invention. The enzyme is able to oxidise an aldehyde to carboxylic acid (specifically indole acetaldehyde to indole acetaldehyde to carboxylic acid (specifically indole acetaldehyde to compress the enzyme. Specifically expression of the DNA are used to CC express the enzyme. Specifically expression of the DNA in transformed CC quality is used to increase (or suppress) production and activity of CC quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging CC under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging CC DNA can be proliferated, differentiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of CC commenced of commenced plants).
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Best Local
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09-JUL-1992; AT-001403.
08-MAR-1993; AT-000437.
29-APR-1993; CH-001310.
04-MAY-1993; CH-001375.
(SANO) SANDOZ LTD.
(SANO) SANDOZ PATENT GMBH.
(SANO) SANDOZ PATENT GMBH.
(SANO) SANDOZ PATENT GMBH.
WPI; 94-010432/02.
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Isolated DNA Sequence - which codes for enzyme having cyclosporin synthetase like activity
Claim 6; Page 17-41; 93pp; English.
This sequence encodes an enzyme which has cyclosporin synthetase-
like activity. This sequence was isolated from Tolypocladium niveum (formerly known as T. inflatum GAMS). The enzyme encoded by this sequence catalyses the peptide biosynthesis of cyclosporins and structurally related molecules. This sequence may be used for the production of cyclosporin by transforming a vector containing this sequence in to a recombinant host. This allows effective production of antibiotic cyclosporin or its derivatives.

Sequence 46899 BP; 10651 A; 13513 C; 12509 G; 10226 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OB-JUL-1994 (LILES COULT),
T. niveum Cyclosporin synthetase gene.
Enzyme; cyclosporin; synthetase-like activity; Tolypocladium niveum;
Enzyme; cyclosporin; synthetase; scrotor; cyclosporin synthetase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
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28 BP; 12 A;
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37781. .4
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40239. .43129
                                                                                                                                                                                                                                                                                                                                                                                                                                   /note- "SalI restriction fragment, Claim 5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "SalI restriction fragment, Claim 4"
                                                                                                                                                                                                                                                                                                                                                                                                                                 fragment,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
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Pred. No.
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                                                                                                                                                                                                                                             Weber
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Best Local
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Best Local :
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Q80911 is the P. falciparum MSA-1 gene cDNA sequence. New procombinant poxviruses containing either the SERA, ABRA, Pfhsp70, AMA-1, Pfs25, Pfs16, CSP, PfSSP2, LSA-1, LSA-1 repeatless, MSA-1, ABA-1, V-terminal p83 or C-terminal g942) genes, or a combination of these in non-essential regions of their genomes are claimed. These poxviruses (pref. with a virulence reducing genomic deletion or disruption) can be used as vaccines against malaria and for the prodn. of Plasmodium immunogens. These viruses provide multicomponent, multistage vaccines due to their expression of sporozite, liver stage, blood stage and sexual stage proteins.
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Plasmodium falciparum MSA-1 gene; recombinant poxvirus;
multicomponent multistage malarial vaccines; immunogens;
19-MAR-1998; U05474.
18-MAR-1998; US-040963.
19-MAR-1997; US-820493.
19-MAR-1997; US-820493.
(GEMY ) GENETICS INST INC.
Agostino MJ, Jacobs K, LaVallie ER, McCoy JM, Merberg Racie LA, Spaulding V, Treacy M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1657 AATGTTGAAAAACAAAGATATAATAAT 1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q8091
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                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                         11-JAN-1999 (first entry)
Human secreted protein dn740_3 cDNA
Secreted protein; human; dn740_3; di
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10-JUN-1994; U06652.
11-JUN-1993; US-075783.
09-JUN-1994; US-257073.
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24-SEP-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-AUG-1995
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                                                                                                                                                                                                                                                                                               Location/Qualifiers 506. .1099 /*tag= a
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81.5%;
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82.1%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        684 C;
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CC foetal brain cDNA library using methods which are selective for CC cDNAs encoding secreted proteins, or was identified as encoding CC analysis of the encoding protein. The nucleotide sequence shows CC analysis of the encoding protein. The nucleotide sequence shows CC homology to some database sequences, and may contain a simple AT CC vereat sequence. The invention provides cDNA clones (see v61477-87) from human foetal kidney, adult testis, and adult or CC (v1477-87). These clones are deposited as ATCC 98364. The polynucleotides and proteins are predicted to have useful brain cDNA libraries that code for secreted proteins (see CC w79087-97). These clones are deposited as ATCC 98364. The clonesical activities which would make them suitable for treating, cc preventing or ameliorating medical conditions in humans and CC animals, although no supporting data is given. Suggested activities include nutritional, immune stimulating (e.g. as ccines) or suppressing, haematopoiesis regulating, tissue growth, thrombolytic, receptor/ligand, antiinflammatory, cadherin/tumour inhibition activities. The polynucleotides are also stated to be useful for gene therapy.

Sequence 1463 BP; 360 A; 408 C; 385 G; 310 T;
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Best Local
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                                                                                                                                                                                                                                                                                   27-MAR-1990;
28-MAR-1989;
04-MAY-1989;
03-JUN-1989;
23-JUN-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1340 TAAAGCACAAAGATATGCTAAT 1319
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This full-length cDNA clone, designated dn740_3, codes secreted human protein (see W79092). It was isolated i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polynucleotide(s) encoding secreted human proteins - derived from human foetal kidney, adult testes and adult or foetal brain cDNA libraries
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                                                                                     Wang EA, Wozney JM WPI; 90-320266/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9011366-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Encodes Human Bone Morphogenic Protein (BMP)-5.
human bone morphogenic protein-5; wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q06168 standard;
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                                                                                                                                                                                                                                23-JUN-1989;
15-NOV-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cartilage formation; ss
stimulating,
                                New bone morphogenic proteins, BMP-5, -6 and -7 - used for
                                                           P-PSDB; R07310
                                                                                                                                              (GENE-) GENETICS INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-1991 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               σ
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                                                                                                                Wozney JM, Celeste AJ;
                                                                                                                                                                                                                                                                                   US-329610.
US-329610.
US-347559.
US-370547.
US-370544.
                                                                                                                                                                  US-438919.
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promoting and inducing bone and/or cartilage
                                                                                                                                                                                                                             US-370549.
US-437409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= b
2064. .2153
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product=BMP-5 precursor
1. .700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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90.9%;
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                                                                                                                                                 INC
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Pred. No. 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
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RESULT
Q41295/c
ID Q412
AC Q412
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KW inju
KW indu
OS Homo
FH Key
FT Cds
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Q32854/c
ID Q32854 standard;
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Matches 22
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Best Local
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See also Q06167, Q06169-Q06173, Q06187-Q06192.
Sequence 2153 BP; 703 A; 420 C; 450 G; 580 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               formation, wound healing and tissue repair Example; Page 45; 96pp; English.

A CDNA library was made in the vector lambda ZAP from human osteosarcoma cell line U-20S poly(A)-contg. RNA. 750,000 recombinants
                                                        13-SEP-1993 (first entry)
Human BMP-5 gene.
Bone morphogenetic protein; bone defect treatment; healing; wound; injury; tissue repair; osteoporosis; burns; incisions; ulcers; neuronal survival increase; fracture reduction; cartilage growth;
                                                                                                                                                                                                                                                                                                                                                                                                  Synergistic compsn. for generating mammalian bone growth - comprises vitamin=D cpd. and bone morphogenetic protein Disclosure; Page 33-34; 44pp; English.

The sequences given in Q32850-56 encode bone morphogenetic proteins (BMP). BMP's increase bone growth and when used in conjunction with vitamin D the level of new bone growth is greater than when a BMP or vitamin D are used alone. The BMP's are administered for systemic treatment at a dose range of lpg to 100 microg. BMP are active as
                                                                                                                                      Q41295 standard; DNA; 2153
Q41295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-DEC-1992.
26-MAY-1992; U04356.
05-JUN-1991; US-709621.
27-MAR-1992; US-856110.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus rattus.
WO9221365-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAY-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q32854;
                              Homo sapiens.
                                                induction; ss.
                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bone; morphogenetic; protein; BMP; growth; vitamin
                                                                                                                                                                                                                                                                                                                                                                                          dimers.
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                                                                                                                                                                                                                                                               1 GATTGCTGAAACACAAAGATATGCTAAT 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92-433371/52.
                                                                                                                                                                                                                                  GATTTCTGAATCACAGATCTATGCTGAT 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                            Similarity 78.0
22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dimer;
                                                                                                                                                                                                                                                                                                                                                                        2153 BP;
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              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA;
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78.6%;
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78.6%;
                                                                                                                                                                                                                                                                                                                                                                        703 A;
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Pred. No.
                                                                                                                                                                                                                                                                                                              Score 18.4;
Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                        420 C;
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5. 18;
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RESULT 131202 AC ID DE AC TI TO DE AC IT T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PT bone defects, healing bone injury and in wound healing
PS Disclosure; Fig 5; 169pp; English.

CC The Sequence is that encoding the human bone morphogenetic protein
CC BMP-5. It may be used in the prodn. of a recombinant heterodimeric
CC protein having bone stimulating activity. This heterodimer is
CC encoded by a sequence encoding BMP-2 or BMP-4 or a fragment and a
CC sequence encoding a second protein or fragment, BMP-5. It may be
CC used in compans. for wound healing, tissue repair, and in similar
CC Increased potency of the heterodimer over individual BMPs may permit
CC induces cartilage and/or bone growth in circumstances where bone
CC induces cartilage and/or bone growth in circumstances where bone
CC is not normally formed, has applications in the healing of bone
CC fractures and cartilage defects in humans and other animals. The
CC contributes to the repair of congenital, trauma induced or oncologic
CC resection induced craniofacial defects, and also is useful in cosmetic
CC plastic surgery. It may be used in the treatment of periodontal
CC disease and in other tooth repair processes. It may also be useful
CC in the treatment of osteoporosis, wound healing (e.g. burns,
CC incisions and ulcers) and related tissue repair, and may increase
CC combined with other agents beneficial to the bone and/or cartilage
CC combined with other selling a decrease in neuronal survival. It may be
CC defect, wound or tissue in question, e.g. EGF, PDGF, TGF-alpha,
CC TGF-beta and insulin-like growth factor
Squence 2153 BP; 703 A; 422 C; 448 G; 580 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local (
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02-NOV-1992; U09430.
04-NOV-1991; US-787496.
07-APR-1992; US-864692.
(GEMY) GENETICS INST INC
ISTAEL D, WOLFMAN NM;
                                                                    20-JUN-1996.
08-DEC-1995; MX0009.
08-DEC-1994; MX-009542.
(INVE-) CENT INVESTIGACION ESTUDIOS AVANZADOS.
Chet I, Flores Martinez A, Herrera Estrella
Transformed Trichoderma spp. strated coding for proteinase PrBl prodn.
                                                           Chet I, Flores M
WPI; 96-300641/30
                                                                                                                                                                                                                                                                   Prbl gene encoding protease PrBl.
prbl: transform; biological control; phytopathogenic fungi; nematode;
infested soll; transgenic; protease; ss.
Trichoderma harzianum strain IMI 206040.
                                                                                                                                                                                                                                                WO9618722-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         T31202 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Recombinant hetero-dimeric BMP proteins - are useful in treating
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1647. .2060
/*tag= b
1. .2153
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78.6%;
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strain prepn. - by rodn. which attacks
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   introduction of cell walls of for
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RESULT 11 V23127

V23127

standard; cDNA; 5053

14-AUG-1998 (first entry)

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                                                                                                                                          New recombinant DNA encoding plant phospho:glycerate mutase or its antigenic epitope(s) - useful for diagnosis or treatment of allergies to pollen and plant-derived foods Claim 1; Fig 1; 160pp; German.

T86242 encodes birch pollen co-factor-independent phosphoglycerate mutase (PGM-1). PGM-1 is a highly conserved plant allergen (panallergen) which can cause cross-reactivity in patients allergic to pollen and plant-derived foods. PGM-1 and it's B cell and T cell epitopes can be used for the in vitro detection of allergy against PGM-1, by measuring serum IgE or a cellular reaction. They can also be used in immunotherapy and will not cause an autoimmune response because PGM-1 is significantly different from the human enzyme, which is co-factor dependent.

Sequence 1593 BP; 424 A; 301 C; 433 G; 435 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and nematodes
Disclosure; Fig 1: 28pp; Spanish.

The present sequence is that of the prb1 gene, which encodes PrB1 protease, isolated from Trichoderma harzianum strain IMI 206040.

Direct transformation of Trichoderma spp. with the prb1 gene is us for producing improved strains of Trichoderma which are useful as biological control agents. They are esp. useful for control of phytopathogenic fungi and nematodes in infested soils.

Sequence 3668 BP; 937 A; 875 C; 812 G; 1044 T;
1128 GATTGCTGAAAAAACGAGAGATGCTA 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9705258-A2.
13-FEB-1997.
02-AUG-1996; AT0141.
                                                                                                                                                                                                                                                                                                                                                                                                                   02-AUG-1995; AT-001320.
(BIOM-) BIOMAY PRODN & HANDELS GMBH
Breitenbach M, Ebner C, Engel E, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T cell; epitope; immunotherapy; detection; diagnosis; hay fever; conserved; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA for birch pollen co-factor-independent phosphoglycerate mutase. Cofactor-independent phosphoglycerate mutase; PGM-1; E.C. 5.4.21; birch; pollen; allergy; plant allergen; panallergen; B cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T86242;
07-JAN-1998 (first entry)
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WPI; 97-145695/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T86242 standard;
                               1 GATTGCTGAAACACAAAGATATGCTA 26
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                                                                  21;
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                                                                                  Similarity
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1. .1593
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                                                                              64.3%;
80.8%;
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Rheinberger H;
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                                                                              Score 18;
Pred. No.
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Pred. No. 24;
                                                                Mismatches
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H
                                                                                              Length 1593
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SCCCCCCSTTTTARRAGE
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V21209_14
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                                               WP Sequence split into
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Query Match
Best Local Similarity
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20-NOV-1995; JP-325129.
05-JAN11996; JP-017150.
26-APR-1996; JP-131206.
(KIRI) KIRIN BREWERY KK.
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06-MAY-1998.
20-NOV-1996;
23-AUG-1996;
20-NOV-1995;
05-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Bovine and human Rho protein-binding protein kinase - used to develop products for treatment of smooth muscle disorders, circulatory disease, cancer and autoimmune disease Disclosure; Pages 39-44; 66pp; Japanese.
The present sequence encodes a protein that has Rho protein-binding activity and protein kinase activity. Inhibitors of the Rho-binding protein kinase can be used to inhibit smooth muscle fibre formation and smooth muscle contraction. Other applications of the Rho protein-binding agent and its' products are as a circulatory disease treating agent or a platelet aggregation inhibitor. Sequence 5053 BP; 1816 A; 879 C; 1092 G; 1266 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA of protein with Rho protein-combining and kinase activity. Rho protein-binding activity; protein kinase activity; inhibitor; smooth muscle fibre formation; smooth muscle contraction; circulatory disease; treatment; tumour formation; metastasis inhibitor;
                                                                                                                                                                                                                                                                                                                                  2331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       autoimmune disease; platelet aggregation inhibitor; ss.
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                                             V21209_14
V21209_15
V21209_16
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                                                                                                                                                                                                                                                                                                                                 ACTCCTCAAACAGAAAGATGTGCTAA 2356
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3889. .3936
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nucleotides do not appear in the protein
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17 fragment
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1000001
1100001
1200001
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1500001
1600001
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80.8%;
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300001
400001
500001
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Pred.
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ts LOCUS V21209 Accession V21209
  Score
Pred.
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110000
210000
310000
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  17.8;
No. 55;
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31;
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            Length 110000;
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RESULT 1
Q4874
AC Q487
AC Q47
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        propertide - useful to transform plant cells to direct a required protein into plants transport system

Protein into plants transport system

PS Claim 6; Page 19; 28pp; English.

CC This sequence encodes a vicilin derived signal peptide. This sequence may be used in the production of a hybrid protein, by creating it to a second sequence. The second sequence may encode a cresistance to bacteria, fungi, or freezing or any other desired effect. This signal peptide enables the hybrid protein to enter the cells transport pathway via the endoplasmic reticulum. Upon entry into the lumen, the signal peptide is cleaved from the second peptide in the same fashion as the vicilin signal peptide would be separated from the vicilin protein to which it is naturally fused. This system may be used to transform virtually any crop plant cell.

SQ Sequence 45 BP; 10 A; 6 C; 7 G;
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Best Local
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                                                    J10113187-A.

J10113187-A.

06-MAY-1998; 324594.

20-NOV-1996; JP-241061.

23-AUG-1996; JP-35119.

05-JAN 1996; JP-017150.

26-APR-1996; JP-131206.
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Vicilin; signal peptide; hybrid protein; resistance; freezing; endoplasmic reticulum; lumen; crop; ss.
                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-1998 (first entry)
CDNA of protein with Rho protein combining and kinase activity.
Rho protein-binding activity; protein kinase activity; inhibitor; smooth muscle fibre formation; smooth muscle contraction; circulatory disease; treatment; tumour formation; metastasis inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pang S, Sanford J
WPI; 93-303493/38.
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Q48744;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      V23128
V23128;
(KIRI ) KIRIN BREW WPI; 98-315475/28
                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                   autoimmune disease; platelet aggregation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel DNA encoding hybrid protein contg. vicilin-derived signal
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13-MAR-1992; US-851429.
(CORR ) CORNELL RES FOUND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard; cDNA; 4363
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                             KIRIN BREWERY KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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1. .4167
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83.3%;
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                                                                                                                                                 PT Aldehyde oxidase gene from plants and related vector and transformed PT cells - particularly for modulating auxin production in plants to PT accelerate maturation, increase yield, induce dwarfing etc.

Claim 3; Page 30-34; 34pp; English,

CC Invention. The enzyme is able to oxidase an aldehyde to carboxylic acid CC (specifically indole acetaldehyde to indole acetic acid (auxin). Cells CC (specifically indole acetaldehyde to indole acetic acid (auxin). Cells CC expression of the DNA are used to express the enzyme. Specifically CC expression of the DNA in transformed plants is used to increase (or CC suppress) production and activity of avain, e.g. to cause earlier CC maturation of crops, improved yields and quality of fruit, to prevent CC to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten CC to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten CC differentiated and regenerated in sterile medium, particularly for CC production of virus-free nursery stock (of flowers or ornamental plants). Sequence 4359 BP; 1146 A; 1056 C; 1138 G; 1019 T;
                                                                       Matches
                                                                                        Query Match
Best Local
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Best Local Similarity
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The present sequence encodes a protein that has Rho protein-binding activity and protein kinase activity. Inhibitors of the Rho-binding protein kinase can be used to inhibit smooth muscle fibre formation and smooth muscle contraction. Other applications of the Rho protein-binding agent and its' products are as a circulatory disease treating agent or a platelet aggregation inhibitor. Sequence 4363 BP; 1587 A; 769 C; 990 G; 1017 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 98-195460/18.
P-PSDB; W57838.
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08-APR-1998.
02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
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Bovine and human
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GATTGCTCAAACACAGAAGTATGC 2144
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Copyright (c) 1993 - 1998
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V65913
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PRP 140 gene and r
Hepatitis C virus
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Aldehyde oxidase g
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Mouse 0.5beta anti
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Banana bunchy top
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Leukocyte JEG18
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Sequence of Coryne Full length Amb a Human TR2-11 DNA b

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v40711/c
ID v40711; standard; cDNA to mRNA;
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PA (SUMO) SUMITOMO CHEM CO LITD.

PR (SShiba T;

DR WPI; 98-195460/18.

PT Aldehyde oxidase gene from plants and related vector and transformed PT cells - particularly for modulating auxin production in plants to PT accelerate maturation, increase yield, induce dwarfing etc.

PX Example 8; Page 7; 34pp; English.

CC This sequence represents a primer for the DNA encoding the Zea mays CC aldehyde oxidase protein of the invention. The enzyme is able to oxidise CC an aldehyde to carboxylic acid (specifically indole acetaldehyde to CC express the enzyme. Specifically expression of the DNA are used to CC express the enzyme. Specifically expression of the DNA are used to plants is used to increase (or suppress) production and activity of CC auxin, e.g. to cause earlier maturation of crops, improved yields and CC quality of fruit, to prevent weak growth, to develop strains able to grow CC under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging CC in rice) and to shorten flowers. Also plant cells that over-express the CC medium, particularly for production of virus-free nursery stock (of CC flowers or ornamental plants).

SQ Sequence 25 BP; 4 A; 8 C; 5 G; 8 T;
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Best Local
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02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
(SUMO ) SUMITOMO CHEM CO
KOShiba T;
WPI; 98-195460/18.
P-PSDB; W57838.
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Aldehyde oxidase; auxin production; plant maturation; ss.
Zea mays.
Location/Qualifiers
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02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to
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Primer for aldehyde oxidase gene.
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mes 25; Conserv
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RESULT
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05-DEC-1996.
31-MAY-1996; 1
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BBTV: intergenic region; promoter; transgenic plant;
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RESULT 4
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA from intergenic region of banana bunchy top virus DNA component useful for promoting, enhancing, regulating or modifying transcription of a non-BBTV gene in transgenic plants Claim 4; Fig lb; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                            Banana bunchy top virus DNA component 3.
BBTV: intergenic region; promoter; transgenic plant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Harding RM;
WPI; 97-034368/03.
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Human gene signatu 3' cDNA sequence o

GenCore version 4:5 Copyright (c) 1993 - 1998 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 15, 1999, 00:27:56 ; Search time 269.22 Seconds (without alignments)
19.566 Million cell updates/sec

Title: Perfect score: Sequence:

US-08-943-144-13
28
1 GATTGCTCAAACACAGAAGTATGCCTAC 28

Scoring table: IDENTITY\_NUC

Searched: 240622 seqs, 94065609 residues

Database :  $N_Geneseq_34:*$ 

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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RESU V407 AC DT DT DT OS OS OS PN PP PR PR PR PR PT	Qу	Qu Be Ma	SQ	င္ပ	င္ပ	င္ပင္ပ	88	3 8	3 6	3 8	8	င္ပ	88	3 3	בי מ	19	P	DR						Į F	g 19	n 15	2 0	XW	DE	DI.	A E	V407	RESU	
V40721 standard; DNA; 28 BP. V40721; V40721; 22-SEP-1998 (first entry) Primer for aldehyde oxidase gene. Aldehyde oxidase; auxin production; plant maturation; PCR primer; ss. Aldehyde oxidase; auxin production; plant maturation; PCR primer; ss. Synthetic. EP-834558-A2. D8-APR-1998. 02-OCT-1996; JP-283314. (SUMO ) SUMITOMO CHEM CO LTD. Koshiba T; WPI; 98-19540/18. Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to accelerate maturation, increase yield, induce dwarfing etc.	1 GATTGCTCAAACACAGAAGTATGCCTAC 28	Query Match 100.0%; Score 28; DB 1; Length 4359; Best Local Similarity 100.0%; Pred. No. 0.00047; Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0	1359 BP; 1146 A; 1056 C; 1138 G; 1019 T;	production of virus-free nursery stock (of flowers or ornamental plants).	differentiated and regenerated in sterile medium. particularly for	flowers. Also plant cells that over-express the DNA can be proliferated.	to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten	weak growth. to develon strains able to grow under subortimal conditions	C suppress) production and activity of auxin, e.g. to cause earlier	expression of the DNA in transformed plants is used to increase (or	transformed with the DNA are used to express the enzyme. Specifically	(specifically indole acetaldehyde to indole acetic acid (auxin). Cells	invention. The enzyme is able to oxidise an aldehyde to carboxylic acid	This sequence encodes the Zea mass.	accelerate maturation, increase yield, induce dwarting etc.	cells - particularly for modulating auxin production in plants to	Aldehyde oxidase gene from plants and related vector and transformed	P-PSDB; W57838.	WPI; 98-195460/18.	т (	04-OCT-1996: JP-283314	02-00T-1997: 117168	08-ADD-144.	9	/##>C-	Key Location/Qualifiers	T	dase	dase gene.	22-SEP-1998 (first entry)	V40/11 Stalldard; CDNA to MKNA; 4339 BP.		SULT 1	ALIGNMENTS

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PT accelerate maturation, increase yield, induce dwarfing etc.

CI file sequence encodes the Zea mays aldehyde oxidase protein of the CC invention. The enzyme is able to oxidise an aldehyde to carboxylic acid (specifically indole accetaldehyde to indole acetic acid (auxin). Cells CC transformed with the DNA are used to express is used to increase (or CC suppression of the DNA in transformed plants is used to increase (or CC suppress) production and activity of auxin, e.g. to cause earlier CC maturation of crops, improved yields and quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, CC flowers. Also plant cells that over-express the DNA can be proliferated, CC differentiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants).

SO Sequence 4412 BP; 1193 A; 1061 C; 1142 G; 1016 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC This sequence represents a primer for the DNA encoding the Zea mays aldehyde oxidase protein of the invention. The enzyme is able to oxidise CC an aldehyde to carboxylic acid (specifically indole acetaldehyde to carboxylic acid (specifically with the DNA are used to compare the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or suppress) production and activity of quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten flowers. Also plant cells that over-express the DNA can be proliferated, differentiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants).

7 C; 5 G; 6 T;
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02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aldehyde oxidase gene. Aldehyde oxidase; auxin production; plant maturation; ss.
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GATTGCTGAAACACAAAGATATGC 2123
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If Ge L, 11ag V;

WHI; 97-448687/41.

IT Identification of interacting polypeptide encoding nucleic acid requences - e.g. to identify protein protein interactions, which requences - e.g. to identify protein processes

Example 8; Fig 25; 105pp; English.

Example 8; Fig 25; 105pp; English.

Plasmid pTERMsc2HlOmyc3SCAM (T79537) can be used in a novel method for identifying nucleic acid sequences (NAS), which encode polypeptides capable of interacting with at least 1 of their fellow polypeptides. This comprises: (a) providing a 1st library of recombinant vectors containing genetically diverse NAS comprising a variety of NAS encoding polypeptides; (b) providing a 2nd library of recombinant vectors containing genetically diverse NAS comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-SEP-1997.
26-FEB-1997; E00931.
26-FEB-1996; EP-102852.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmid pTERMsc2H10myc3sCAM.

Protein-protein interaction; interacting polypeptide;
polyphage principle; plasmid pTERMsc2H10myc3sCAM; vector;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to accelerate maturation, increase yield, induce dwarfing etc.

Example 8; Page 7; 34pp; English.
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02-OCT-1997: 117168.
04-OCT-1996: JP-283314.
(SUMO ) SUMITOMO CHEM CO LTD.
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W09732017-A1.
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T79537;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Koshiba T;
WPI; 98-195460/18.
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EP-834558-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GATTGCTCAAACACAGAAGTATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GATTGCTGAAACACAAAGATATGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MORPHOSYS GES
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28 BP; 12 A; 4 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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83.3%;
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Mismatches
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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equence /, Appi	quence 5, A	equence 1095, A	equence 1, Appl	equence 1095 A	equence 1. App	equence 1 Appl	equence 6. Appl	equence 1,	equence 1, Appl	equence 1, Appl	equence 1, Appl	equenc	equence 1, Appl	equence 2, Appl	equence 3, Appl	equence 1, A	equence 3, Appl	equence 3, Appl	equence 1, Appl	equence 13, App	equence 1, App	equence 5, Appl	equence 1, Appl	equence 7, Appl	equence 4, App	equence 4, Appl	equence 1, Appl	equence 1, Appl	equence 1,	equence 43, App	equence 1, Appl	equence 73, Ap	equence 71, App	equence 69, App	equence 67, App	equence 23, App	Description		

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US-08-463-483A-30	US-08-764-233A-1	US-08-458-076A-6	US-08-457-646A-6	US-08-457-342-6	US-08-456-837-6	US-08-258-261B-6	US-08-410-804-2
Sequence 30, Appl	۲,	, თ	, ω	ģ	, Q	Sequence 6, Appli	Sequence 2, Appli

; NAME/KEY: CDS; LOCATION: 33685065; LOCATION: 33685065; OTHER INFORMATION: /label= ORF3; OTHER INFORMATION: /note= "Open Reading Frame #3 of DNA;	NAME/KEY: CDS  LOCATION: 22313313  OTHER INFORMATION: /label- ORF2  OTHER INFORMATION: /note- "Open Reading Frame #2 of DNA FRATIDE."	\$ <b>\$</b> 5 6	STRANDEDESS: single STRANDEDESS: single POPOLOGY: linear MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO	ON FOR SEC	VE: 919-541-8587 919-541-8689	; REGISTRATION NUMBER: 38,241 ; REFERENCE/DOCKET NUMBER: CGC 1506/CIP5 ; TELECOMMINICATION INFORMATION:	FORMATION: Timothy	FILING DATE: TBA : CIASSIPICATION: 435	ATA:	+1 0 Version #1	TYPE: F1	E 50	; COUNTRY: USA	rytown	; ADDRESSEE: Ciba-Geigy Corporation ; STREET: 520 White Plains Road	86	OF INVENTION: antipathogenic substance	; APPLICANT: Kirner, Sabine	; APPLICANT: van Pee, Karl-Heinz	Ryals, John Andr	; APPLICANT: Hill, Dwight Steven	AL INFORMATION:	<pre>; Sequence 23, Application US/08729214 ; Patent No. 5817502</pre>	RESULT 1 US-08-729-214-23/c	ОТИВНИСТЕ	ALIGNMENTS
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FEATURE:
NAME/KEY:
LOCATION:
US-08-467-603-67
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; LOCATION: 5093..6202
; OTHER INFORMATION: /label= ORF4
; OTHER INFORMATION: /note= "Open Reading Frame #4 of DNA sequence"
US-08-729-214-23
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Best Local
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                                                                                                                                                                                                                     FILING DATE: 31-Dec-92
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: IMI-026CP(IPC-048CP)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEFAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 67:
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                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 791 base pairs
TYPE: nucleic acid
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 514
PRIOR APPLICATION DATA:
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ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Allergenic Proteins and TITLE OF INVENTION: Peptides from Dog TITLE OF INVENTION: Dander and Uses Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Morgenstern, Jay P.
APPLICANT: Kanleczny, Andrzey
APPLICANT: Bizindaukas, Christ:
APPLICANT: Brauer, Andrew W.
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                                                                                                                  MOLECULE TYPE:
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                                                                  NAME/KEY:
LOCATION:
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                                                                                                                                                     STRANDEDNESS:
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                                                                                                                                       TOPOLOGY:
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5. 5843672
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Pred. No. 3
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Best Local Similarity
"~+~hes 19; Conserva
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                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 07/999,71:
FILING DATE: 31-DeC-92
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: IMI-
TELECOMMUNICATION INFORMATION:
TELEPAX: (617) 227-7400
TELEPAX: (617) 227-75941
INFORMATION FOR SEQ ID NO: 69:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 69
Patent No.
                                                         Matches
                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: ASCII-text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street, suite 510
                                                                                                                                                                           MOLECULE TYPE: FEATURE:
                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 793 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Brauer, Andrew W
TITLE OF INVENTION: Allerger
TITLE OF INVENTION: Dander &
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137 ATCGGACTTGTTGGAGGCCAGGGC 114
                                                         Local Similarity
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ZIP: 02109
                                                                                                                                                            NAME/KEY:
                                                                                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Boston
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             1 ATCGGACTTGTTGTCGGCCTTGAC 24
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Peptides from Dog
Dander and Uses Therefor
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2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/5C_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/5D_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/pcTUS9_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
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US-07-872-644-16
US-07-872-644-26
US-08-297-494-16
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SULT 2 5.08-282-845-1 Sequence 1, A Patent No. 57 GENERAL INFO APPLICANT: TITLE OF 1	1 1049	uery Match est Local : atches 1	SEQUENTS SEQUENCE OR SEQUENCE		8 9 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
2 -845-1 No. 5719 L INFORM ICANT: E OF INV	GGNGAI	atch cal Simi 14;	1 1 6 - 676 B - 2 CCC 2 . App. LICANT: Mestration Mestration New Me		14.2 14.2 14.2 14.2 14.3	
1, Application 1, Application 5. 5719263 INFORMATION: CANT: Reed, S' OF INVENTION:	RGCNGTN:	lari Cons	Plicat Plicat Plicat Plicat Plicat Plicat Plicat Provided Place Pl		61.7 61.7 61.7 61.7 61.7 60.9 60.9	
n US Leve	GGNGARGCNGTNTAYGTNGAY       :        :       : 	66. ty 63. ervative	RESULT 1 US-08-006-676B-2 US-08-006-676B-2 Sequence 2, Application US/08006676B Patent No. 5411865 GENERAL INFORMATION: Diagnosis of NUMBER OF SEQUENCES: 3 CORRESPONDENCE ADDRESS: ADDRESS: ADDRESSE: Jeffrey B. Oster STATE: Washington COUNTRY: Mercer Island STATE: Washington COUNTRY: USA ZIP: 98040-4906 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatable OPERATING SYSTEM: PC-DOS/MS-DC SOFTWARE: WORD for Windows COURRENT APPLICATION NUMBER: US/08/006, FILING DATE: 15-JAN-1993 CLASSIFICATION NUMBER: 32,585 REFERENCE/DOCKET NUMBER: REED- TELEPHONE: (206) 232 7845 TELEPAN: (206) 237 7847 TELEPAN: (206)		325 2291 2656 1844 1625 436 436 3432	
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TITLE OF INVENTION:

Species

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; NAME/KEY:
; LOCATION:
US-08-282-845-1
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                                                                                                                                                                                                                                          Sequence 2, Application PC/TUS9400324 GENERAL INFORMATION: APPLICANT: Reed, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (206)587-0430
TELEFAX: (206)233-0644
INFORMATION FOR SEQ ID NO: 1:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08
FILING DATE: JANUARY 1
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                             1049 GGCGAGGAGGTGTACGTGGACG 1070
                                                                                                                                                                                                   APPLICANT: Reed, Steven
TITLE OF INVENTION: Diagnosis of Leishmaniasis
NUMBER OF SEQUENCES: 3
                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Immunex C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: Apple Macintosh Operating System 7.1 SOFTWARE: Microsoft Word for Macintosh 5.1a CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 5004
TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple Ma
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LENGTH: 3319 base pairs
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple System 7.1
SOFTWARE: Microsoft Word, version 5.1a
                                                                                                                                      STREET: 51 Uni
CITY: Seattle
                                                                                                    COUNTRY:
                                                                                        ZIP: 98101
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US-08-409-995-3/c
; Sequence 3, Application US/08409995
; Patent No. 5646259
; GENERAL INFORMATION:
APPLICANT: Barenkamp, Stephen I.
APPLICANT: St. Geme III, Joseph W.
ITILE OF INVENTION: Haemophilus Adhesion Proteins
NUMBER OF SEQUENCES: 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCT-US94-00324-2
                                                                      CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-610
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
TELEPAX: (415) 398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loc
Matches
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REFERENCE/DOCKET NUMBER: 501
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEPHAX: (206) 233-0644
INFORMATION FOR SEQ ID NO: 2:
                                   SEQUENCE CHARACTERISTICS:
LENGTH: 5738 base pairs
                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/409,995
                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/006
FILING DATE: 15-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patticia Anne
REGISTRATION NUMBER: 34,693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1049 GGCGAGGAGGTGTACGTGGACG 1070
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA APPLICATION NUMBER: PO
                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 94111-4187
                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: San Francisco
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nes 14; Conserv
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
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linear
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4.4 5

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6749 17955

T47561 V56642

Cytomegalovirus pp Actinoplanes sp. a

GenCore version 4.5 Copyright (c) 1993 - 1998 Com Compugen Ltd

OM nucleic - nucleic search, using sw model

July 15, 1999, 00:27:34 ; Search time 269.22 Seconds

(without alignments)
16.072 Million cell updates/sec

Title: Perfect score: US-08-943-144-6 23

GGNGARGCNGTNTAYGTNGAYGA

23

Scoring table: IDENTITY\_NUC

Searched: 240622 seqs, 94065609 residues

Database : N\_Geneseq\_34:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

9 1 736646 6 1 751091 6 1 7511094 6 1 7511105 6 1 7511115 7 1 767199 8 1 767199 6 1 767199 6 1 767200 6 1 747564 7 747557 7 1 747559 9 1 747559 9 1 747559	18 14.2 61.7 2291 1 Q30163 19 14.2 61.7 2656 1 Q30172 20 14.2 61.7 1844 1 Q30175 21 14.2 61.7 1117 1 Q42595 22 14.2 61.7 792 1 Q42596 23 14.2 61.7 792 1 Q42596 24 14.2 61.7 1625 1 Q83980 25 14.2 61.7 1625 1 Q83969 26 14.2 61.7 2656 1 Q83969 27 14.2 61.7 2656 1 Q83969 28 14.2 61.7 2691 1 Q839957 29 14.2 61.7 269 1 Q83793 29 14.2 61.7 615 1 T18233	14.6 63.5 3683 1 Q85999 14.6 63.5 1782 1 T04121 14.6 63.5 6000 1 T06308 14.6 63.5 1782 1 T18119 14.6 63.5 1782 1 T18119 14.6 63.5 1782 1 T18119 14.6 63.5 1782 1 T40207 14.6 63.5 7291 1 T41476 14.6 63.5 7291 1 T41476 14.6 63.5 1942 1 T42979 14.6 63.5 1942 1 T42979	1 17.8 77.4 4412 1 V40710 17.8 77.4 4359 1 V40711 2 17.8 77.4 23 1 V40711 3 17.8 77.4 23 1 V40713 4 15.2 66.1 3319 1 070152 5 15.2 66.1 3319 1 T42166 6 15.2 66.1 110000 1 V21209_08	Result Query No. Score Match Length DB ID
carbose biosyrcarbose biosyrcarbose biosyrcaing sequence 1 kD brain cal DNA for 63 kD ippocampus cal ovine brain cal ovine brain 60 ovine brain 61 uman brain 61 ytomegalovirus ytomegalovirus uman cytomegal ZK promoted cy ZK promoted cy	AM-40 clone vine lung E kD CaM pBle quence encc quence of v man CAP18 c clic-GMP st clic-GMP st clic-GMP st clic-GMP st	callus cel ermostable gingivali abidopsis rphyromona hingan bic mato lycop emophilus p5 downy m p5icum ann hingomonas	dehyde oxidase dehyde oxidase imer for aldehy gene of Leish ishmania chagas	Description

RESULT, V40710 PT Aldehyde oxidase gene from plants and related vector and transformed proceeding the continuous production in plants to produce the production in production in plants to production in plants to product the product product product product product product product production and activity of auxin, e.g. to cause earlier consultant production and activity of auxin, e.g. to cause earlier maturation of crops, improved yields and quality of fruit, to prevent the induce dwarfing (e.g. to inhibit lodging in rice) and to shorten confiderantiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants).

So Sequence 4412 BP; 1193 A; 1061 C; 1142 G; 1016 T; 08-APR-1998.
02-OCT-1997; 117168.
04-OCT-1996; JP-283314.
(SUMO ) SUMITOMO CHEM CO LTD.
KOShiba T;
WPI; 98-195460/18.
P-PSDB; W57837. 22-SEP-1998 (first entry)
Aldehyde oxidase gene.
Aldehyde oxidase; auxin production; plant maturation; ss.
Zea mays. V40710 standard; cDNA to mRNA; 4412 BP. V40710; /\*tag= Location/Qualifiers ALIGNMENTS

Query Match
Best Local Similarity 69.6
Conservative 77.48; 69.68; ω •• Score 17.8; Pred. No. 1. Mismatches . 80 DB 1; 4. Length 4412; Indels 0 Gaps

0

밁 Ş 1840 GGGGAGGCTGTGTACGTTGATGA 1862 1 GGNGARGCNGTNTAYGTNGAYGA 23

RESULT V40711

V40711 standard; cDNA to mRNA; 4359 BP V40711;

22-SEP-1998 (first entry)

Aldehyde oxidase; auxin production; plant maturation;

Zea mays. Key CDS Location/Qualifiers 91..4140
/\*tag= a

EP-834558-A2.
08-APR-1998.
02-OCT-1997; 117168.
04-OCT-1996; JP-2833: (SUMO) SUMITOMO CHEM CO LTD.

KOShiba T;

WPI; 98-195467

WPI; 98-195460/18. P-PSDB; W57838.

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V4071
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Claim 3; Page 30-34; 34pp; English.

CC This sequence encodes the Zee mays aldehyde oxidase protein of the CC Invention. The enzyme is able to oxidise an aldehyde to carboxylic acid (specifically indole acetaldehyde to indole acetic acid (auxin). Cells CC transformed with the DNA are used to express the enzyme. Specifically CC expression of the DNA in transformed plants is used to increase (or CC suppress) production and activity of auxin, e.g. to cause earlier CC maturation of crops, improved yields and quality of fruit, to prevent CC weak growth, to develop strains able to grow under suboptimal conditions, CC induce dwarfing (e.g. to inhibit lodging in rice) and to shorten CC flowers. Also plant cells that over-express the DNA can be proliferated, CC differentiated and regenerated in sterile medium, particularly for production of virus-free nursery stock (of flowers or ornamental plants).

So Sequence 4359 BP; 1146 A; 1056 C; 1138 G; 1019 T;
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Best Local Similarity
Matches 16; Conser
                 This sequence represents a primer for the DNA encoding the Zea mays aldehyde oxidase protein of the invention. The enzyme is able to oxidise an aldehyde to carboxylic acid (specifically indole acetaldehyde to indole acetaldehyde to carboxylic acid (specifically indole acetaldehyde to express the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or suppress) production and activity of express the enzyme. Specifically expression of the DNA in transformed plants is used to increase (or suppress) production and activity of auxin, e.g. to cause earlier maturation of crops, improved yields and quality of fruit, to prevent weak growth, to develop strains able to grow under suboptimal conditions, to induce dwarfing (e.g. to inhibit lodging in rice) and to shorten flowers. Also plant cells that over-express the DNA can be proliferated, differentiated and regenerated in sterile
                                                                                                                                                                                                                                                                                                                                                                         08-APR-1998.
02-OCT-1997;
04-OCT-1996;
                                                                                                                                                                                                                                                                                                                               (SUMO ) SUMITOMO CHEM CO LTD. Koshiba T;
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     medium, particularly
                                                                                                                                                                                                                                 Aldehyde oxidase gene from plants and related vector and transformed cells - particularly for modulating auxin production in plants to accelerate maturation, increase yield, induce dwarfing etc.

Example 6: Page 7: 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                   WPI; 98-195460/18.
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       for production of virus-free nursery
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3; Mismatches
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C; 1138 G; 1019 T;
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T42166;
09-MAR-1997
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24-OCT-1996.
19-APR-1996; 1
21-APR-1995; 1
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Reed
                                                                                                                                                                                                                                                                                                                                           Leishmania chagasi K39 antigen.
Leishmania chagasi; acidic ribosomal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The K39 gene encodes a polypeptide which comprises a number of repeated units (described in R57366). Detection of antibodies directed against this repeated unit in a patients sample is indicative of leishmaniasis. The antigenic repeat unit can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Diagnosis of Leishmaniasis - by determining the pantibodies that bind to a K39 repeat unit antigen Disclosure; Page 15-17; 28pp; English.
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K39 gene of Leishmania chagasi
Parasite; leishmaniasis; infect
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Q70152
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P-PSDB; R57365.
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10-JAN-1994; U00324.
15-JAN-1993; US-006676.
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Sequence
                          19-APR-1996; U05472.
21-APR-1995; US-428414.
(CORI-) CORIXA CORP.
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# ALIGNMENTS

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Cloning and molecular characterization of plant aldehyde oxidase
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Sekimoto, H.
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J 1601. Chem. 272 (24), 15280-15285 (1997)
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Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01,

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Sekimoto, H.
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Fax:+81-48-462-4691)
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NTGSGVYKDODLYDKYIDIKGIPELSYINKNDKAIELGSVVSISKAIBYLSDGNLVFK
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GPKLGCGEGGCGACVVLVSKYDPATDEVTEFSASSCLTLLHSVDRCSVTTSEGIGNTR
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/db_xref="taxon:4577"
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Pred. No. 12;
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17; Conser
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Submitted (19-OCT-1996) to the DDBJ/EMBL/GenBank databases.
Hiroyuki Sekimoto, The Institute of Physical and Chemical Resi
Frontier Research Program; Hirosawa 2-1, Wako, Saitama 351-01
                                                                                                                                Schizosaccharomyces pombe Eukaryotes; Fungi; Ascomycota;
                                                                               Archaeascomycetes; Schizosaccharomycetales; Schizosaccharomycetaceae; Schizosaccharomyces
                                                                                                                                                                                                                                                    g1141785
The Schizosaccharomyces pombe spqM gene is a new member of the Qm
                               Masson, J.Y., Vadnais, J. and Ramotar, D
                                                                                                                                                                                              fission yeast.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1120
                                                      (bases 1 to 815)
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SKDHLIBDICLAFGAYGADHAIRARKVEDYLKGKTYSSSYILEAVRLLKGSIKSEGS
THPEYRISLAVSFLFTFLSSLANSLNESAKVSGTNEHSPEKQLKLDINLDFIRSAGEI
FFTDAYKPVGKAIKKAGVEIQASGEAVYVDDIPAPKDCLYGAFIYSTHPHAHVKSINF
KPSLASGKIITVTTAKDIFSGGONVGYSSFPMIGEBALFADPVABFAGQNIGVVLAQTO
KYAYMAKQAIIEYSTBHLQPPILTIEDAIERSSFGQTLFVAPKPVGDYDKGMSEAD
HKILSAEVKIESQYFFYMEPQVALAIPDEDNCITIYFSTQLPESTQNVVAKCVGIPFH
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VKYSVGKSKOKI TALHIDLGI NGGI SEDMS PHIA ABP VIĞŞIKKI NWĞHLAFDTRVÇK
TINYSSKSSMRAR GEDAĞÇSET IRA II IEHVA SALADTIN'I TRKKILLIDEESLAVEF GÇSA
GEASTYSLYTMEDKLASS PEYQHRA EMVEÇENRS NKWKKRGI SCVPVTY EVQLIPPT PG
KVSIMIDGSI AV EVGGYELGĞÜLMTK VKQMTA FELGELLÇAKÇRVI ÇADTL
SMIQĞĞYTĞĞŞTİSETŞCEAV KRSCVALVESLKEPI KENLEAKTGTVENSALI QAŞAMŞ
SVILSAHAYMTPDPTFTSYLNYĞAĞT SEVELIDVLTĞATTILRSDLYYDCĞQSLNPAVD
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GVYKDQDLYDKYIDIKGIPELSVINRNDKGIELGSVVSISKAIEVLSDGNLVFRKIAG
HLNKVASPFVRNTATIGGNIVMAQRLPFASDIATILLAAGSTVTIQVASKRLCFTLEE
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91, .4140
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GCGEGGCGACVVLVSKYDPATDEVTEFSASSCLTLLHSVDRCSVTTSEGIGNTKDGYH
PVQQRLSGFHASQCGFCTPGMCMSIFSALVKADKAANRPAPPAGFSKLTSSEAEKAVS
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QKRVLSSKASGEPPLLLASSVHCAMREAIRAARKEFSVCTGPANSAITFQMDVPATMP
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/db_xref="PID:g2589164"
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REFERENCE AUTHORS

REFERENCE

AUTHORS TITLE JOURNAL MEDLINE

RESULT D88452/c

DEFINITION

D8845

D88452

SOURCE KEYWORDS ACCESSION Snoo

ORGANISM

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Matches Query Match Best Local :

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Gaps

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BASE COUNT ORIGIN

polyA\_site

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OM nucleic - nucleic search, using sw model
                                                                                        GenCore version 4.5 Copyright (c) 1993 - 1998 Compugen Ltd.
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July 14, 1999, 21:50:51; Search time 189.37 Seconds (without alignments)
11.619 Million cell updates/sec

Run on:

US-08-943-144-15 24

1 TTCCACCTATGGTTGCAGTGTTCC 24

Title: Perfect score: Sequence:

Scoring table: IDENTITY\_NUC

Searched: 176461 seqs, 45838279 residues

Database : Issued\_Patents\_NA: \*

554321

/cgn2\_6/ptodata/1/ina/5A\_COMB.seq:\*
/cgn2\_6/ptodata/1/ina/5B\_COMB.seq:\*
/cgn2\_6/ptodata/1/ina/5C\_COMB.seq:\*
/cgn2\_6/ptodata/1/ina/5D\_COMB.seq:\*
/cgn2\_6/ptodata/1/ina/FD\_COMB.seq:\*
/cgn2\_6/ptodata/1/ina/Backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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US-08-466-344-15	US-08-466-344-9	US-08-040-548-15	US-08-040-548-9	PCT-US94-14436-1	PCT-US94-02891-68	US-08-861-464-9	US-08-404-531B-8
Sequence 15, Appl	Sequence 9, Appli	Sequence 15, Appl	Sequence 9, Appli	Sequence 1, Appli	Sequence 68, Appl	Sequence 9, Appli	Sequence 8, Appli

# ALIGNMENTS

T 195-814E-5/c  uence 5, Application US/08295814E  ent No. 5658786  NERAL INFORMATION:  APPLICANT: Smith, Kelli E.  APPLICANT: Hartig, Paul R.  APPLICANT: Hartig, Paul R.  APPLICANT: Weinshank, Richard L.  RITTLE OF INVENTION: TRANSPORTERS AND GABA TITLE OF INVENTION: TRANSPORTERS AND USES THEREOF  COMMUNES PEQUENCES: 35  COMPUTER READABLE FORM:  MEDION TYPE: PC-DOS/MS-DOS  SOTTWARE: PATENTION DATA:  APPLICATION NUMBER: US/08/295,814E  FILLED ATE: DECEMBER: 9,1994  CLASSIFICATION NUMBER: 28,678  REFERENCE/DOCKET NUMBER: 40558-B-PCT-US  REFERENCE/DOCKET NUMBER: 28,678  REFERENCE/DOCKET NUMBER: 28,678  REFERENCE/DOCKET NUMBER: 40558-B-PCT-US  TELECHONE: 212-391-0225  TELECHONE: 212-391-0225  TELECHONE: 212-391-0225  TELECHONE: 212-391-0225  TELECHONE: 212-391-0225  TELECHONE: 212-391-025  TELECHONE: 212-391-025  TELECHONE: 212-391-025  TELECHONE: 210-025  TELECHONE: 200-025  TELECH
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; LOCATION: 127..1989
; OTHER INFORMATION:
PCT-US93-01959-5
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                                                                 Matches
                                                                                           Query Match
                                                                            Best Local Similarity
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TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 2093 base pairs
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APPLICANT: Borden, A. Laurence
APPLICANT: Hartig, R. Paul
APPLICANT: Weinshank, L. Richard
TITLE OF INVENTION: DNA ENCODING TAURINE AND GABA
TITLE OF INVENTION: TRANSPORTERS AND USES THEREOF
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PATENTIN RELEASE #1.24
CURRENT APPLICATION DATA;
APPLICATION NUMBER: PCT/US93/0195
FILING DATE: 19930304
CLASSIFICATION:
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NAME: White, John
REGISTRATION NUMBER: 28,678
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-977-9550
                                                                                                                                                                                                                                                          IMMEDIATE SOURCE:
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ORIGINAL SOURCE:
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MEDIUM TYPE: Floppy disk
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ANTI-SENSE:
626 TTCCAGCTATGGTTGCAGTGGGCC 603
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OPERATING SYSTEM:
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STATE: New York
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                     1 TTCCACCTATGGTTGCAGTGTTCC 24
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                                                               Conservative
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                                                                            80.0%;
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                                                               Mismatches
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                                                                            Score 19.2; DB 5;
Pred. No. 0.64;
                                                                                           Length 2093;
                                                               Indels
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US-08-248-474-100/c
; Sequence 100, Application US/08248474
; Patent No. 5612471
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                                                                                                                                                                                                                                                                                  US-07-884-811-15
                                                                                                                                                                                                                                                                                                       RESULT
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TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 100:
SEQUENCE CHARACTERISTICS:
LENGTH: 218 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                                                          Sequence 15, Application US/07884811 Patent No. 5316921
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local Similarity
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                                                                                                                                                                                                                       GENERAL INFORMATION:
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APPLICANT: WILSON, MARK A.
TITLE OF INVENTION: NEWATODE-INDUCE GENES IN TOMATO
NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA RE-LEASE #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
ORGANISM: Lycopersicon esciorganism: Red'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 23
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
COMPUTER READABLE FORM
                                                                                                                                      NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                            APPLICANT: Godowski, Paul J. Lokker, Nathalie A. TITLE OF INVENTION: SINGLE-CHAIN HEPATOCYTE GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                      STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: Steuart Stre
CITY: San Francisco
                  COUNTRY: U
ZIP: 94080
                                                                                                                                                                                                                                                                                                                                                                  71 TTCCACCTATGGTGTAAATGTACC 48
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                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                        1 TICCACCIATGGTTGCAGTGTTCC 24
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                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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79.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 16; DB 1; Length 218; Pred. No. 16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                5; Indels
                                                                                                                                                                                 Mark, Melanie R
FACTOR VARIANTS
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